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<211> 2276

<212> DNA

<213> Homo sapiens

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<211> 2525

<212> DNA

<213> Homo sapiens

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<210> 2005

<211> 3574

<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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出証特２００４－３０５９６６０

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<211> 1692

<212> DNA

<213> Homo sapiens

<400> 2059

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<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<211> 2573

<212> DNA

<213> Homo sapiens

<400> 2066

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<210> 2067

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<211> 2563

<212> DNA

<213> Homo sapiens

<400> 2067

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<210> 2068

<211> 3219

<212> DNA

<213> Homo sapiens

<400> 2068

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<211> 3341

<212> DNA

<213> Homo sapiens

<400> 2069

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<210> 2081

<211> 2295

<212> DNA

<213> Homo sapiens

<400> 2081

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gtggggggac cgcgaggcga gcgcgggagc ctgggcggcg agccgggtgt gagctgcctg    240

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<210> 2082

<211> 3038

<212> DNA

<213> Homo sapiens

<400> 2082

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<210> 2083

<211> 1418

<212> DNA

<213> Homo sapiens

<400> 2083

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<210> 2084

<211> 2612

<212> DNA

<213> Homo sapiens

<400> 2084

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<210> 2085

<211> 1894

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<212> DNA

<213> Homo sapiens

<400> 2085

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<210> 2086

<211> 1963

<212> DNA

<213> Homo sapiens

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<210> 2092

<211> 1803

<212> DNA

<213> Homo sapiens

<400> 2092

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aggaggaaga gaaagaacca ccgcaaagag agatggcaac aaaggacaaa atgcttggag    240
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<211> 2361

<212> DNA

<213> Homo sapiens

<400> 2093

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ggttgagctg catccgggtc ccatcccaca gggacccct ggccgctgca gatgcatgct   180

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caaagtgctg agattacagg catgagctac catgcctggc ctaaaacatt tttaatggaa   2100

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caacttaaca agatagccag cacttaaatc acaaaataga acaccgctag gacctctttg   2220

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<211> 2751

<212> DNA

<213> Homo sapiens


<400> 2094

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<210> 2095

<211> 3490

<212> DNA

<213> Homo sapiens

<400> 2095

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<211> 2400

<212> DNA

<213> Homo sapiens

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<211> 2128

<212> DNA

<213> Homo sapiens

<400> 2107

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<211> 2072

<212> DNA

<213> Homo sapiens

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<211> 2280

<212> DNA

<213> Homo sapiens

<400> 2109

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<212> DNA

<213> Homo sapiens

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gggtctggag cagggctgga gtggggctca gatgtagtag gctggcagtt aaaggtgcca   4080

gatgtgagcc aggctgctgg gtttgaatcc tggagctgcc tcatagcagc agtaggactt   4140

tgggtaactt acataggtgc tgtatgcctc agtgacctca tctgtaatat agagatgata   4200

agagtacctg tctcattggt ctactgagtt gtccggatta actcattaaa tgagttaaaa   4260

ctcatgaagc ccttggaact gtgactgaca catagtaagt actcaataaa aaataactgc   4320

taagaccagc cacagtggct cacacctgta atctgagcat tctgggaggc caaggcggaa   4380

gaatcccttg agcccagtat ttcaagacca gcctaaaggt caacataggc agactctgtc   4440

tctactatac atttttagat taaatttta taataataat aaccactaaa atgtgattac   4500

taaagacagc ttcttcacag tacaaagaga tgctcttctg agtaccaact ctttggagga   4560

taaactgccc ttataccttc aaaaataaca cttgccatat atcaagtcct ttcaagtacc   4620
```

tggagattta cccagcactc tgagataaat accattatcc ctctgggcac acagaggctc 4680

agagaggttt agtcatttgc ccaaagtcac acagcctgta cgaggccagg ctgggactca 4740

aactcagttc tgactgattc taaaatcatg tgtttaactg ctgcactcta ggaccacccg 4800

caatggatct gtgaaccaga accagctctg gttctgacct gcctagtagg gcctttggca 4860

tttggggggag gaggccattg gaagtccgaa gcccccttcc agattaggca tgattgcagt 4920

aagagaagag acagaccctt tggccccca cccctgctca ggctcaaaaa tgcagaccct 4980

gccgaaacag tccttctcac ccagaagcac cccatagggt gggctgagta accttggggg 5040

cctcgtcagt cttgggctgc cccatgccct gcacagcccg cctgaggttt gaggaagggg 5100

cagttggcta ggcccagact ggagaaagcc accccaccat ggctcttctg caagaacccc 5160

cggccagcca caagcctaag cccctcctt aaaagctcct cctctgacct tagctgtgca 5220

tcaagggaga aaagaaagct ccaggccggg tgcggtggct cacacctgca atcccagcac 5280

tttgggagac caaggctggc agatcattag gtcaggagtt cgagaccagc ctggccagca 5340

aggtgaaacc ccatctctac taaaattaca aaaaattagt caggcatggt gacacgtgcc 5400

tgtagtccca gctactctgg aggctgaggc aggagaattg cttgaaccca ggaggcgaag 5460

gttgcagtaa accaagatca cgccactaca ctccagcctg ggcgacagag caagactctg 5520

tctc 5524

<210> 2189

<211> 239

<212> PRT

<213> Homo sapiens

<400> 2189

Met His Thr His Thr His Thr His Thr Thr Pro Lys Met Ala Asp Leu
1   5   10   15

Leu Gly Ser Ile Leu Ser Ser Met Glu Lys Pro Pro Ser Leu Gly Asp
                20   25   30

Gln Glu Thr Arg Arg Lys Ala Arg Glu Gln Ala Ala Arg Leu Lys Lys

```
              35                    40                    45
Leu Gln Glu Gln Glu Lys Gln Gln Lys Val Glu Phe Arg Lys Arg Met
         50                    55                    60
Glu Lys Glu Val Ser Asp Phe Ile Gln Asp Ser Gly Gln Ile Lys Lys
    65                    70                    75                    80
Lys Phe Gln Pro Met Asn Lys Ile Glu Arg Ser Ile Leu His Asp Val
                   85                    90                    95
Val Glu Val Ala Gly Leu Thr Ser Phe Ser Phe Gly Glu Asp Asp Asp
                  100                   105                   110
Cys Arg Tyr Val Met Ile Phe Lys Lys Glu Phe Ala Pro Ser Asp Glu
              115                   120                   125
Glu Leu Asp Ser Tyr Arg Arg Gly Glu Glu Trp Asp Pro Gln Lys Ala
              130                   135                   140
Glu Glu Lys Arg Lys Leu Lys Glu Leu Ala Gln Arg Gln Glu Glu Glu
145                   150                   155                   160
Ala Ala Gln Gln Gly Pro Val Val Val Ser Pro Ala Ser Asp Tyr Lys
                  165                   170                   175
Asp Lys Tyr Ser His Leu Ile Gly Lys Gly Ala Ala Lys Asp Ala Ala
              180                   185                   190
His Met Leu Gln Ala Asn Lys Thr Tyr Gly Cys Val Pro Val Ala Asn
              195                   200                   205
Lys Arg Asp Thr Arg Ser Ile Glu Glu Ala Met Asn Glu Ile Arg Ala
              210                   215                   220
Lys Lys Arg Leu Arg Gln Ser Gly Glu Glu Leu Pro Pro Thr Ser
225                   230                   235
```

<210> 2190

<211> 213

<212> PRT

<213> Homo sapiens

<400> 2190

Met	Ala	Ala	Ala	Ala	Ala	Ala	Gly	Glu	Ala	Arg	Arg	Val	Leu	Val	Tyr
1				5					10					15	

Gly Gly Arg Gly Ala Leu Gly Ser Arg Cys Val Gln Ala Phe Arg Ala
　　　　　　　 20　　　　　　　　　　 25　　　　　　　　　 30

Arg Asn Trp Val Thr Ala Glu Val Gly Lys Leu Leu Gly Glu Glu Lys
　　　　　 35　　　　　　　　 40　　　　　　　　　 45

Val Asp Ala Ile Leu Cys Val Ala Gly Gly Trp Ala Gly Gly Asn Ala
　　　　 50　　　　　　　 55　　　　　　　　 60

Lys Ser Lys Ser Leu Phe Lys Asn Cys Asp Leu Met Trp Lys Gln Ser
65　　　　　　　 70　　　　　　　　 75　　　　　　　　　 80

Ile Trp Thr Ser Thr Ile Ser Ser His Leu Ala Thr Lys His Leu Lys
　　　　　　　　 85　　　　　　　　 90　　　　　　　　　 95

Glu Gly Gly Leu Leu Thr Leu Ala Gly Ala Lys Ala Ala Leu Asp Gly
　　　　　　　 100　　　　　　　　 105　　　　　　　　 110

Thr Pro Gly Met Ile Gly Tyr Gly Met Ala Lys Gly Ala Val His Gln
　　　　　　 115　　　　　　　　 120　　　　　　　　 125

Leu Cys Gln Ser Leu Ala Gly Lys Asn Ser Gly Met Pro Pro Gly Ala
　　　　　 130　　　　　　　　 135　　　　　　　　 140

Ala Ala Ile Ala Val Leu Pro Val Thr Leu Asp Thr Pro Met Asn Arg
145　　　　　　　 150　　　　　　　　 155　　　　　　　　　 160

Lys Ser Met Pro Glu Ala Asp Phe Ser Ser Trp Thr Pro Leu Glu Phe
　　　　　　　 165　　　　　　　　 170　　　　　　　　 175

Leu Val Glu Thr Phe His Asp Trp Ile Thr Gly Lys Asn Arg Pro Ser
　　　　　　　 180　　　　　　　　 185　　　　　　　　 190

Ser Gly Ser Leu Ile Gln Val Val Thr Thr Glu Gly Arg Thr Glu Leu

```
            195                 200                 205
Thr Pro Ala Tyr Phe
            210
```

<210> 2191

<211> 244

<212> PRT

<213> Homo sapiens

<400> 2191

```
Met Glu Gln Leu Lys Ser Phe Gln Ile Ile Ala His Leu Lys Arg Leu
 1               5                  10                  15
Gln Glu Glu Ile Asn Glu Val Lys Thr Trp Ser Asn Arg Ile Thr Glu
                20                  25                  30
Lys Gln Asp Ile Leu Asn Asn Ser Leu Thr Thr Leu Ser Gln Asp Ile
                35                  40                  45
Thr Lys Val Asp Gln Ser Thr Thr Ser Met Ala Lys Asp Val Gly Leu
            50                  55                  60
Lys Ile Thr Ser Val Lys Thr Asp Ile Arg Arg Ile Ser Gly Leu Val
 65                  70                  75                  80
Thr Asp Val Ile Ser Leu Thr Asp Ser Val Gln Glu Leu Glu Asn Lys
                85                  90                  95
Ile Glu Lys Val Glu Lys Asn Thr Val Lys Asn Ile Gly Asp Leu Leu
                100                 105                 110
Ser Ser Ser Ile Asp Arg Thr Ala Thr Leu Arg Lys Thr Ala Ser Glu
            115                 120                 125
Asn Ser Gln Arg Ile Asn Ser Val Lys Lys Thr Leu Thr Glu Leu Lys
        130                 135                 140
```

Ser Asp Phe Asp Lys His Thr Asp Arg Phe Leu Ser Leu Glu Gly Asp
145   150   155   160

Arg Ala Lys Val Leu Lys Thr Val Thr Phe Ala Asn Asp Leu Lys Pro
              165   170   175

Lys Val Tyr Asn Leu Lys Lys Asp Phe Ser Arg Leu Glu Pro Leu Val
              180   185   190

Asn Asp Leu Thr Leu Arg Ile Gly Arg Leu Val Thr Asp Leu Leu Gln
              195   200   205

Arg Glu Lys Glu Ile Ala Phe Leu Ser Glu Lys Ile Ser Asn Leu Thr
          210   215   220

Ile Val Gln Ala Glu Ile Lys Asp Ile Lys Asp Glu Ile Ala His Ile
225   230   235   240

Ser Asp Met Asn

<210> 2192

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2192

Met Gln Ser Lys Ala Pro Leu Met Pro Ala Ala Leu Arg Pro Ser Met
1   5   10   15

Ser Pro Ala Gln Gln Ser Ser Tyr Tyr Lys Arg His Arg Ala Glu His
              20   25   30

Ile Ala Ser Asp Pro Glu Glu Ser Pro Pro Ser Gln Leu Gly Thr Ile
              35   40   45

Val Lys Glu Met Cys Trp Arg Lys Ser Pro Ser Val Ser Cys Leu Ser

```
            50                    55                    60
Ile Lys Leu His Ser Val Trp Val Cys Ile Leu Pro Ile Leu Ala Val
65                    70                    75                    80
Leu Gly Leu Arg Ile Leu Gly Ser Ser Arg Val Ser Ile Pro Tyr His
                      85                    90                    95
Ala His Leu Gly Asn Arg Gly Thr Gly Gln Tyr Arg
                     100                   105
```

<210> 2193

<211> 475

<212> PRT

<213> Homo sapiens

<400> 2193

```
Met Asp Trp Thr Trp Arg Val Leu Phe Val Val Ala Ala Ser Thr Gly
 1                     5                    10                    15
Val Gln Ser Gln Val Gln Leu Met Gln Ser Gly Ala Glu Val Lys Lys
                      20                    25                    30
Pro Gly Ser Ser Val Lys Val Ser Cys Lys Thr Ser Gly Ala Ser Phe
                      35                    40                    45
Ala Ser Tyr Thr Ile Ser Trp Val Arg Gln Ala Pro Gly Gln Gly Leu
            50                    55                    60
Glu Trp Met Gly Gly Ile Ile Pro Val Phe Arg Thr Pro Asn Tyr Ala
65                    70                    75                    80
Gln Lys Phe Gln Gly Arg Leu Thr Ile Thr Ala Asp Asp Ser Thr Gly
                      85                    90                    95
Thr Ala Tyr Met Glu Leu Ser Ser Leu Arg Tyr Glu Asp Thr Ala Val
                     100                   105                   110
```

Tyr Tyr Cys Ala Ser Leu Ala Cys Gly Asp Asp Cys Ser Phe Leu Tyr
      115   120   125

His Tyr Tyr Met Ala Ala Trp Gly Arg Gly Thr Ala Val Thr Val Ser
      130   135   140

Ser Ala Ser Thr Lys Gly Pro Ser Val Phe Pro Leu Ala Pro Ser Ser
145   150   155   160

Lys Ser Thr Ser Gly Gly Thr Ala Ala Leu Gly Cys Leu Val Lys Asp
            165   170   175

Tyr Phe Pro Glu Pro Val Thr Val Ser Trp Asn Ser Gly Ala Leu Thr
            180   185   190

Ser Gly Val His Thr Phe Pro Ala Val Leu Gln Ser Ser Gly Leu Tyr
        195   200   205

Ser Leu Ser Ser Val Val Thr Val Pro Ser Ser Ser Leu Gly Thr Gln
      210   215   220

Thr Tyr Ile Cys Asn Val Asn His Lys Pro Ser Asn Thr Lys Val Asp
225   230   235   240

Lys Lys Val Glu Pro Lys Ser Cys Asp Lys Thr His Thr Cys Pro Pro
            245   250   255

Cys Pro Ala Pro Glu Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro
        260   265   270

Pro Lys Pro Lys Asp Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr
        275   280   285

Cys Val Val Val Asp Val Ser His Glu Asp Pro Glu Val Lys Phe Asn
      290   295   300

Trp Tyr Val Asp Gly Val Glu Val His Asn Ala Lys Thr Lys Pro Arg
305   310   315   320

Glu Glu Gln Tyr Asn Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val
            325   330   335

Leu His Gln Asp Trp Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser

```
                340                 345                 350
Asn Lys Ala Leu Pro Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys
                355                 360                 365
Gly Gln Pro Arg Glu Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp
      · 370                 375                 380
Glu Leu Thr Lys Asn Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe
385                 390                 395                 400
Tyr Pro Ser Asp Ile Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu
                      405                 410                 415
Asn Asn Tyr Lys Thr Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe
                      420                 425                 430
Phe Leu Tyr Ser Lys Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly
            435                 440                 445
Asn Val Phe Ser Cys Ser Val Met His Glu Gly Leu His Asn His Tyr
            450                 455                 460
Thr Gln Lys Ser Leu Ser Leu Ser Pro Gly Lys
465                 470                 475
```

<210> 2194

<211> 133

<212> PRT

<213> Homo sapiens

<400> 2194

```
Met Cys Gly Val Met Ile Tyr Val Phe Phe Phe Glu Met Gly Trp Ser
1                   5                   10                  15
Leu Ala Leu Ser Pro Arg Leu Glu Cys Ser Gly Val Ile Leu Ala His
            20                  25                  30
```

Cys Asn Leu Cys Leu Leu Gly Ser Ser Asp Leu Pro Ala Ser Ala Ser
         35   40   45

Ser Val Ala Gly Thr Thr Gly Ala Cys Gln His Thr Arg Leu Ile Phe
         50   55   60

Val Phe Leu Val Glu Thr Lys Val Pro Gly Leu Lys Arg Ser Met Gly
65   70   75   80

Leu Ser Phe Leu Lys Cys Trp Asp Tyr Arg Arg Glu Pro Leu Tyr Thr
         85   90   95

Phe Asn Leu Ile Ser Cys Met Tyr Tyr Thr Pro Asp Phe Lys Phe Tyr
         100   105   110

Arg Pro Leu Ile Phe Tyr Ser Leu Pro Lys Gln Met Thr Arg Phe Leu
         115   120   125

Ala Val Phe Ser Gly
         130

<210> 2195

<211> 124

<212> PRT

<213> Homo sapiens

<400> 2195

Met Leu Pro Ser Lys Ala Phe Glu Phe Ala Thr Val Lys Ser Met His
1   5   10   15

Gly Ile Phe Gly Cys Gly Leu Ala Leu Pro Pro Val Phe Thr Ala Glu
         20   25   30

Leu Leu Tyr Leu Thr Arg Ala Cys Ala Ser Asp Glu Gln Pro Phe Ile
         35   40   45

Thr Ala Leu Arg Pro Pro Pro Arg Pro Pro Pro Ser Ala Leu Gln Phe

```
            50                    55                    60
Ile Ser Arg Leu Val Pro Ile Ala Thr Cys Gly Leu Gly Gly Pro Pro
65                    70                    75                    80
Asp Ile Leu Ser Phe Gly Ser Pro Val Thr Pro Glu Leu Leu Pro Phe
                      85              90                    95
Trp Gly Ala His Ile Cys Asp Thr Leu Val Cys Pro Val His Phe Leu
                 100                   105                   110
His Leu Glu Phe Leu Ser Cys Ser His Ile Ser Ile
                 115                   120
```

<210> 2196

<211> 139

<212> PRT

<213> Homo sapiens

<400> 2196

```
Met Lys Arg Gly Tyr Pro His Pro Ser Glu Gly Leu Ser Val Gly Leu
1                     5                     10                    15
Gln Ala Pro Leu Ala Ser Cys Leu Leu Val Gly Thr Ser Gly Ala Ala
                      20                    25                    30
His Cys Gln Val Gln Leu Ser Arg Pro Cys Cys Val Trp Gly Gln Trp
                 35                    40                    45
Ala Leu Glu Ser Ser Ser Gln Thr Ala Pro Gly Ala Val Pro Leu Ser
            50                    55                    60
Leu Leu Leu Leu Pro Arg Pro Arg Cys Ser Leu Ser Val Leu Gln His
65                    70                    75                    80
Arg Ala Leu Asp Cys Pro Cys Pro Ala Gly Gly Ala Gly Gln His Trp
                 85                    90                    95
```

Ser His Ser Leu Arg Trp Cys His Ser Ser Pro Glu Glu Leu Ser Ser
　　　　　　　　100　　　　　　　　　105　　　　　　　　　110

Arg His Arg Ile Pro Pro Val Thr Ile Gly Arg Gln Asp Thr Gln Asp
　　　　　　　　115　　　　　　　　　120　　　　　　　　　125

Leu Gly Gly Cys Gly Thr Ser Glu Arg Arg Gly
　　　　　　　　130　　　　　　　　　135

<210> 2197

<211> 157

<212> PRT

<213> Homo sapiens

<400> 2197

Met Gly Gly Pro Gly Leu Gly Ser His Leu Ser Gly Gly Gly Trp Ser
　1　　　　　　　　5　　　　　　　　　10　　　　　　　　　15

Arg Ala Arg Ser Met Cys Thr Pro Gly Thr Lys Asp Pro Arg Ala Leu
　　　　　　　　20　　　　　　　　　25　　　　　　　　　30

Leu Leu Asp Ala Leu Arg Ser Pro Thr Ser Asn Gln Asp Leu Gly Glu
　　　　　　　　35　　　　　　　　　40　　　　　　　　　45

Ala Ser Leu Gln Ala Thr Leu Leu Gly Leu Ala Ala Leu Asn Lys Ala
　　　　　　　　50　　　　　　　　　55　　　　　　　　　60

Tyr Pro Glu Val Leu Ala Gln Gly Arg Thr Ala Arg Val Thr Leu Thr
65　　　　　　　　70　　　　　　　　　75　　　　　　　　　80

Ser Pro Trp Pro Arg Pro Leu Pro Trp Pro Gly Asn Thr Leu Gly Gln
　　　　　　　　85　　　　　　　　　90　　　　　　　　　95

Val Gly Thr Pro Gly Thr Lys Ala Leu Arg Trp Cys Leu Gln Gly Ala
　　　　　　　　100　　　　　　　　　105　　　　　　　　　110

Gln Arg Pro His Cys Ser Leu Arg Arg Ser Thr Asp Ile Ser Thr Phe

●

```
              115                  120                  125
Arg Asn His Leu Pro Leu Thr Lys Ala Ser Gln Thr Gln Gln Glu Asp
      130                  135                  140
Ser Gly Glu Gln Pro Leu Pro Pro Thr Ser Asn Gln Gly
145                  150                  155
```

<210> 2198

<211> 392

●

<212> PRT

<213> Homo sapiens

<400> 2198

```
Met Leu Ala Pro Cys Phe Leu Tyr Ser Leu Gln Asn Trp Asp Ile Ile
  1               5                  10                  15
Phe Asn Ala Gln Tyr Pro Glu Leu Pro Pro Asp Phe Ile Phe Gly Glu
              20                  25                  30
Asp Ala Glu Phe Leu Pro Asp Pro Ser Ala Leu Gln Asn Leu Ala Ser
              35                  40                  45
```

●

```
Trp Asn Pro Ser Asn Pro Glu Cys Leu Leu Leu Val Val Lys Glu Leu
        50                  55                  60
Val Gln Gln Tyr His Gln Phe Gln Cys Ser Arg Leu Arg Glu Ser Ser
65                  70                  75                  80
Arg Leu Met Phe Glu Tyr Gln Thr Leu Leu Glu Glu Pro Gln Tyr Gly
                  85                  90                  95
Glu Asn Met Glu Ile Tyr Ala Gly Lys Lys Asn Asn Trp Asn Leu Ala
                  100                 105                 110
Ser Trp Asn Pro Ser Asn Pro Glu Cys Leu Leu Leu Val Val Lys Glu
        115                 120                 125
```

Leu Val Gln Gln Tyr His Gln Phe Gln Cys Ser Arg Leu Arg Glu Ser
130   135   140

Ser Arg Leu Met Phe Glu Tyr Gln Thr Leu Leu Glu Glu Pro Gln Tyr
145   150   155   160

Gly Glu Asn Met Glu Ile Tyr Ala Gly Lys Lys Asn Asn Trp Thr Gly
                165   170   175

Glu Phe Ser Ala Arg Phe Leu Leu Lys Leu Pro Val Asp Phe Ser Asn
                180   185   190

Ile Pro Thr Tyr Leu Leu Lys Asp Val Asn Glu Asp Pro Gly Glu Asp
                195   200   205

Val Ala Leu Leu Ser Val Ser Phe Glu Asp Thr Glu Ala Thr Gln Val
            210   215   220

Tyr Pro Lys Leu Tyr Leu Ser Pro Arg Ile Glu His Ala Leu Gly Gly
225   230   235   240

Ser Ser Ala Leu His Ile Pro Ala Phe Pro Gly Gly Gly Cys Leu Ile
                245   250   255

Asp Tyr Val Pro Gln Val Cys His Leu Leu Thr Asn Lys Val Gln Tyr
                260   265   270

Val Ile Gln Gly Tyr His Lys Arg Arg Glu Tyr Ile Ala Ala Phe Leu
            275   280   285

Ser His Phe Gly Thr Gly Val Val Glu Tyr Asp Ala Glu Gly Phe Thr
290   295   300

Lys Leu Thr Leu Leu Leu Met Trp Lys Asp Phe Cys Phe Leu Val His
305   310   315   320

Ile Asp Leu Pro Leu Phe Phe Pro Arg Asp Gln Pro Thr Leu Thr Phe
                325   330   335

Gln Ser Val Tyr His Phe Thr Asn Ser Gly Gln Leu Tyr Ser Gln Ala
                340   345   350

Gln Lys Asn Tyr Pro Tyr Ser Pro Arg Trp Asp Gly Asn Glu Met Ala

●

```
            355                  360                  365
Lys Arg Ala Lys Ala Tyr Phe Lys Thr Phe Val Pro Gln Phe Gln Glu
            370                  375                  380
Ala Ala Phe Ala Asn Gly Lys Leu
385                  390
```

<210> 2199

<211> 114

●

<212> PRT

<213> Homo sapiens

<400> 2199

```
Met Gln Thr Ser Phe Ala Ala Lys Glu Pro Gly Gln Ala Arg Leu Leu
1                   5                   10                  15
Pro Gly Leu Ala Arg Asn Arg Leu Arg Arg His Phe Pro Leu Ser Leu
                20                  25                  30
Pro Gly Pro Glu Arg Ser Pro Pro Leu Pro Ser Arg Pro Leu Ser Gly
                35                  40                  45
```

●

```
Ser Leu Gln Val Ser Ile Gln Lys Arg Leu Arg Ala Ala Gln Arg Trp
        50                  55                  60
Arg Pro Gly Gly Ala Glu Ala Arg Gly Gln Met Thr Arg Leu Gly Gly
65                  70                  75                  80
Lys Gly Gly Gln Gln Phe Pro Pro Gly Gln Lys Ile Ile Ser Lys Asp
                85                  90                  95
Ile Leu Ala Leu Thr Ala Leu Ser Val Ala Arg Lys Leu Ser Ser Val
                100                 105                 110
Asn Cys
```

<210> 2200

<211> 123

<212> PRT

<213> Homo sapiens

<400> 2200

```
Met Gly Leu Pro Arg Pro Lys Arg Leu Lys Lys Lys Glu Phe Ser Leu
 1               5                  10                  15
Glu Glu Ile Tyr Thr Asn Lys Asn Tyr Lys Ser Pro Pro Ala Asn Arg
                20                  25                  30
Cys Leu Glu Thr Ile Phe Glu Glu Pro Lys Glu Arg Asn Gly Thr Leu
            35                  40                  45
Ile Ser Ile Ser Gln Gln Lys Arg Lys Arg Val Leu Glu Phe Gln Asp
        50                  55                  60
Phe Thr Val Pro Arg Lys Arg Arg Ala Arg Gly Lys Val Lys Val Ala
65                  70                  75                  80
Gly Ser Phe Thr Arg Ala Gln Lys Ala Ala Val Gln Ser Arg Glu Leu
                85                  90                  95
Asp Ala Leu Leu Ile Gln Lys Leu Met Glu Leu Glu Thr Phe Phe Ala
                100                 105                 110
Lys Glu Glu Glu Gln Glu Gln Ser Ser Gly Cys
                115                 120
```


<210> 2201

<211> 364

<212> PRT

<213> Homo sapiens

<400> 2201

```
Met Cys Phe Arg Val Lys Phe Tyr Pro Ala Asp Pro Ala Ala Leu Lys
1               5                   10                  15
Glu Glu Ile Thr Arg Tyr Leu Val Phe Leu Gln Ile Lys Arg Asp Leu
                20                  25                  30
Tyr His Gly Arg Leu Leu Cys Lys Thr Ser Asp Ala Ala Leu Leu Ala
            35                  40                  45
Ala Tyr Ile Leu Gln Ala Glu Ile Gly Asp Tyr Asp Ser Gly Lys His
        50                  55                  60
Pro Glu Gly Tyr Ser Ser Lys Phe Gln Phe Phe Pro Lys His Ser Glu
65                  70                  75                  80
Lys Leu Glu Arg Lys Ile Ala Glu Ile His Lys Thr Glu Leu Ser Gly
                85                  90                  95
Gln Thr Pro Ala Thr Ser Glu Leu Asn Phe Leu Arg Lys Ala Gln Thr
                100                 105                 110
Leu Glu Thr Tyr Gly Val Asp Pro His Pro Cys Lys Asp Val Ser Gly
            115                 120                 125
Asn Ala Ala Phe Leu Ala Phe Thr Pro Phe Gly Phe Val Val Leu Gln
        130                 135                 140
Gly Asn Lys Arg Val His Phe Ile Lys Trp Asn Glu Val Thr Lys Leu
145                 150                 155                 160
Lys Phe Glu Gly Lys Thr Phe Tyr Leu Tyr Glu Lys Lys Ile Ile Leu
                165                 170                 175
Thr Tyr Phe Ala Pro Thr Pro Glu Ala Cys Lys His Leu Trp Lys Cys
                180                 185                 190
Gly Ile Glu Asn Gln Ala Phe Tyr Lys Leu Glu Lys Ser Ser Gln Val
            195                 200                 205
```

Arg Thr Val Ser Ser Ser Asn Leu Phe Phe Lys Gly Ser Arg Phe Arg
        210   215   220

Tyr Ser Gly Arg Val Ala Lys Glu Val Met Glu Ser Ser Ala Lys Ile
225   230   235   240

Lys Arg Glu Pro Pro Glu Ile His Arg Ala Gly Met Val Pro Ser Arg
                245   250   255

Ser Cys Pro Ser Ile Thr His Gly Pro Arg Leu Ser Ser Val Pro Arg
                260   265   270

Thr Arg Arg Arg Ala Val His Ile Ser Ile Met Glu Gly Leu Glu Ser
        275   280   285

Leu Arg Asp Ser Ala His Ser Thr Pro Val Arg Ser Thr Ser His Gly
        290   295   300

Asp Thr Phe Leu Pro His Val Arg Ser Ser Arg Thr Asp Ser Asn Glu
305   310   315   320

Arg Val Ala Val Ile Ala Asp Glu Ala Tyr Ser Pro Ala Asp Ser Val
                325   330   335

Leu Pro Thr Pro Val Ala Glu His Ser Leu Glu Leu Met Leu Leu Ser
                340   345   350

Arg Gln Ile Asn Gly Ala Thr Cys Ser Ile Glu Glu
        355   360

<210> 2202

<211> 446

<212> PRT

<213> Homo sapiens

<400> 2202

Met Asp Ser Ser Ala Val Val Lys Gly Thr Asn Ser His Val Pro Asp

```
        1                5                    10                        15
Cys His Thr Lys Gly Ser Ser Phe Leu Gly Lys Glu Leu Ser Leu Asp
                20                    25                    30
Glu Ala Phe Pro Asp Gln Gln Asn Gly Ser Ala Thr Asn Ala Trp Asp
                35                    40                    45
Gln Ser Ser Cys Ser Ser Pro Lys Trp Glu Cys Thr Glu Leu Ile His
           50                    55                    60
Asp Ile Pro Leu Pro Glu His Arg Ser Asn Thr Met Phe Ile Ser Glu
65                    70                    75                    80
Thr Glu Arg Glu Ile Met Thr Leu Gly Gln Glu Asn Gln Thr Ser Ser
                     85                 90                    95
Val Ser Asp Asp Arg Val Lys Leu Ser Val Ser Gly Ala Asp Thr Ser
                100                    105                    110
Val Ser Ser Val Asp Gly Pro Val Ser Gln Lys Ala Val Gln Asn Glu
                115                    120                    125
Asn Ser Tyr Gln Met Glu Glu Asp Gly Ser Leu Lys Gln Ser Ile Leu
           130                    135                    140
Ser Ser Glu Leu Leu Asp His Pro Tyr Cys Lys Ser Pro Leu Glu Ala
145                    150                    155                    160
Pro Leu Val Cys Ser Gly Leu Lys Leu Glu Asn Gln Val Gly Gly Gly
                165                    170                    175
Lys Asn Ser Gln Lys Ala Ser Pro Val Asp Asp Glu Gln Leu Ser Val
                180                    185                    190
Cys Leu Ser Gly Phe Leu Asp Glu Val Met Lys Lys Tyr Gly Ser Leu
                195                    200                    205
Val Pro Leu Ser Glu Lys Glu Val Leu Gly Arg Leu Lys Asp Val Phe
                210                    215                    220
Asn Glu Asp Phe Ser Asn Arg Lys Pro Phe Ile Asn Arg Glu Ile Thr
225                    230                    235                    240
```

Asn Tyr Arg Ala Arg His Gln Lys Cys Asn Phe Arg Ile Phe Tyr Asn
                245   250   255

Lys His Met Leu Asp Met Asp Asp Leu Ala Thr Leu Asp Gly Gln Asn
                260   265   270

Trp Leu Asn Asp Gln Val Ile Asn Met Tyr Gly Glu Leu Ile Met Asp
                275   280   285

Ala Val Pro Asp Lys Val His Phe Phe Asn Ser Phe Phe His Arg Gln
                290   295   300

Leu Val Thr Lys Gly Tyr Asn Gly Val Lys Arg Trp Thr Lys Lys Val
305   310   315   320

Asp Leu Phe Lys Lys Ser Leu Leu Leu Ile Pro Ile His Leu Glu Val
                325   330   335

His Trp Ser Leu Ile Thr Val Thr Leu Ser Asn Arg Ile Ile Ser Phe
                340   345   350

Tyr Asp Ser Gln Gly Ile His Phe Lys Phe Cys Val Glu Asn Ile Arg
                355   360   365

Lys Tyr Leu Leu Thr Glu Ala Arg Glu Lys Asn Arg Pro Glu Phe Leu
                370   375   380

Gln Gly Trp Gln Thr Ala Val Thr Lys Cys Ile Pro Gln Gln Lys Asn
385   390   395   400

Asp Ser Asp Cys Gly Val Phe Val Leu Gln Tyr Cys Lys Cys Leu Ala
                405   410   415

Leu Glu Gln Pro Phe Gln Phe Ser Gln Glu Asp Met Pro Arg Val Arg
                420   425   430

Lys Arg Ile Tyr Lys Glu Leu Cys Glu Cys Arg Leu Met Asp
                435   440   445

<210> 2203

●

<211> 157

<212> PRT

<213> Homo sapiens

<400> 2203

Met Val Ile Phe Arg Trp Trp Lys Ile Ser Leu Arg Ser Glu Tyr Arg
1   5   10   15

Ser Thr Lys Pro Gly Glu Ala Lys Glu Thr His Glu Asp Phe Leu Glu
                20   25   30

●

Asn Ser His Leu Gln Gly Gln Thr Ala Leu Ile Phe Gly Ala Arg Ile
                35   40   45

Leu Asp Tyr Val Ile Asn Leu Cys Lys Gly Lys Phe Asp Phe Leu Glu
            50   55   60

Arg Leu Ser Asp Asp Leu Leu Leu Thr Ile Ile Ser Tyr Leu Asp Leu
65   70   75   80

Glu Asp Ile Ala Arg Leu Cys Gln Thr Ser His Arg Phe Ala Lys Leu
                85   90   95

Cys Met Ser Asp Lys Leu Trp Glu Gln Ile Val Gln Ser Thr Cys Asp
                100   105   110

●

Thr Ile Thr Pro Asp Val Arg Ala Leu Ala Glu Asp Thr Gly Trp Arg
            115   120   125

Gln Leu Phe Phe Thr Asn Lys Leu Gln Leu Gln Arg Gln Leu Arg Lys
            130   135   140

Arg Lys Gln Lys Tyr Gly Asn Leu Arg Glu Lys Gln Pro
145   150   155

<210> 2204

<211> 430

<212> PRT

<213> Homo sapiens

<400> 2204

Met Ala Glu Pro Gln Ala Glu Ser Glu Pro Leu Leu Gly Gly Ala Arg
1   5   10   15

Gly Gly Gly Gly Asp Trp Pro Ala Gly Leu Thr Thr Tyr Arg Ser Ile
                20   25   30

Arg Val Gly Pro Gly Ala Ala Ala Arg Trp Asp Leu Cys Ile Asp Gln
            35   40   45

Ala Val Val Phe Ile Glu Asp Ala Ile Gln Gly Tyr Leu Phe Gly Trp
        50   55   60

Ala His Phe Gln Lys Asn Leu Trp Leu Leu Gly Tyr Leu Val Val Leu
65   70   75   80

Val Val Ser Leu Val Asp Trp Thr Val Ser Leu Ser Leu Val Cys His
                85   90   95

Glu Pro Leu Arg Ile Arg Arg Leu Leu Arg Pro Phe Phe Leu Leu Gln
                100   105   110

Asn Ser Ser Met Met Lys Lys Thr Leu Lys Cys Ile Arg Trp Ser Leu
            115   120   125

Pro Glu Met Ala Ser Val Gly Leu Leu Leu Ala Ile His Leu Cys Leu
    130   135   140

Phe Thr Met Phe Gly Met Leu Leu Phe Ala Gly Gly Lys Gln Asp Asp
145   150   155   160

Gly Gln Asp Arg Glu Arg Leu Thr Tyr Phe Gln Asn Leu Pro Glu Ser
                165   170   175

Leu Thr Ser Leu Leu Val Leu Leu Thr Thr Ala Asn Asn Pro Asp Val
                180   185   190

Met Ile Pro Ala Tyr Ser Lys Asn Arg Ala Tyr Ala Ile Phe Phe Ile

195　　　　　　　　　　200　　　　　　　　　　205

Val Phe Thr Val Ile Gly Ser Leu Phe Leu Met Asn Leu Leu Thr Ala

210　　　　　　　　　215　　　　　　　　　220

Ile Ile Tyr Ser Gln Phe Arg Gly Tyr Leu Met Lys Ser Leu Gln Thr

225　　　　　　　　　230　　　　　　　　　235　　　　　　　　　240

Ser Leu Phe Arg Arg Arg Leu Gly Thr Arg Ala Ala Phe Glu Val Leu

245　　　　　　　　　250　　　　　　　　　255

Ser Ser Met Val Gly Glu Gly Gly Ala Phe Pro Gln Ala Val Gly Val

260　　　　　　　　　265　　　　　　　　　270

Lys Pro Gln Asn Leu Leu Gln Val Leu Gln Lys Val Gln Leu Asp Ser

275　　　　　　　　　280　　　　　　　　　285

Ser His Lys Gln Ala Met Met Glu Lys Val Arg Ser Tyr Gly Ser Val

290　　　　　　　　　295　　　　　　　　　300

Leu Leu Ser Ala Glu Glu Phe Gln Lys Leu Phe Asn Glu Leu Asp Arg

305　　　　　　　　　310　　　　　　　　　315　　　　　　　　　320

Ser Val Val Lys Glu His Pro Pro Arg Pro Glu Tyr Gln Ser Pro Phe

325　　　　　　　　　330　　　　　　　　　335

Leu Gln Ser Ala Gln Phe Leu Phe Gly His Tyr Tyr Phe Asp Tyr Leu

340　　　　　　　　　345　　　　　　　　　350

Gly Asn Leu Ile Ala Leu Ala Asn Leu Val Ser Ile Cys Val Phe Leu

355　　　　　　　　　360　　　　　　　　　365

Val Leu Asp Ala Asp Val Leu Pro Ala Glu Arg Asp Asp Phe Ile Leu

370　　　　　　　　　375　　　　　　　　　380

Gly Ile Leu Asn Cys Val Phe Ile Val Tyr Tyr Leu Leu Glu Met Leu

385　　　　　　　　　390　　　　　　　　　395　　　　　　　　　400

Leu Lys Val Phe Ala Leu Gly Leu Arg Gly Tyr Leu Ser Tyr Pro Ser

405　　　　　　　　　410　　　　　　　　　415

Asn Val Phe Asp Gly Leu Leu Thr Val Val Leu Leu Val Lys

420　　　　　　　　　425　　　　　　　　　430

<210> 2205

<211> 129

<212> PRT

<213> Homo sapiens

<400> 2205

Met Pro Ser Phe Leu Pro Ile His Tyr Cys Ser Pro Asn Val Leu Cys
1   5   10   15

Val Trp Thr Ala Ile Thr Ser Ser Thr Phe Ser Pro Tyr Tyr Leu Leu
                20   25   30

Ile Leu Gln Asn Ser Ala His Pro Gln Ile Pro Leu Arg Ser Pro Ser
                35   40   45

Gly Cys Ser Ser Pro Ser Asn Leu Asn Lys Met Ser Phe Leu Gly Ala
        50   55   60

Leu Ile Ala Phe Arg Leu Asp Thr Gly Pro Gln Ser Glu Val Ser Ala
65   70   75   80

Trp Thr Ala Ser Pro Ser Ser Gly Asn Ser Leu Glu Met Gln Ile Met
                85   90   95

Arg Pro Tyr Pro Arg Pro Pro Glu Thr Glu Thr Leu Gly Val Gly Pro
                100   105   110

Thr Thr Cys Val Leu Thr Ser Pro Ala Gly Asp Cys Asp Glu His Lys
                115   120   125

Val

<210> 2206

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2206

Met Ala Ala Pro Cys Arg Cys Gly Trp Thr Trp Val Glu Leu Val Arg

1　　　　　　　　　5　　　　　　　　10　　　　　　　　15

Glu Ala Arg Cys Leu Asp Leu Leu Met Val Thr Gly Leu Ala Val Lys

　　　　　　　　　20　　　　　　　　25　　　　　　　　30

Ala His Leu Gly Ser Val Ser Thr Pro Trp Ser Ser His Val Ser Val

　　　　　　　　　35　　　　　　　　40　　　　　　　　45

Thr Phe Gln His Trp Pro Asp Gly Gly Asn Leu Leu Arg Ala His Ser

　　　　　　　　50　　　　　　　　55　　　　　　　　60

Pro Ala Pro Trp His Ser Arg Ser Gln Leu Ser Leu Ile Arg Thr Arg

65　　　　　　　　70　　　　　　　　75　　　　　　　　80

Cys Pro Leu Val Arg Leu Leu Val Ile Gly Phe Pro Ser Ser Pro Asn

　　　　　　　　　85　　　　　　　　90　　　　　　　　95

Val Pro Val Ile Ser His

　　　　　　　　　100

<210> 2207

<211> 555

<212> PRT

<213> Homo sapiens

<400> 2207

Met Ile Val Thr Gly Gly Leu Ala Trp Trp Asn Asp Phe Met Val Leu

1　　　　　　　　　5　　　　　　　　10　　　　　　　　15

Ala Cys Tyr Asn Ile Asn Asp Arg Gln Glu Glu Leu Arg Val Tyr Leu
　　　　　　　　　20　　　　　　　　　25　　　　　　　　　30

Arg Thr Ser Asn Leu Asp Asn Ala Phe Ala His Val Thr Lys Ala Gln
　　　　　　　　　35　　　　　　　　　40　　　　　　　　　45

Ala Glu Thr Leu Leu Leu Ser Val Phe Gln Asp Met Val Ile Val Phe
　　　　　　　　　50　　　　　　　　　55　　　　　　　　　60

Arg Ala Asp Cys Ser Ile Cys Leu Tyr Ser Ile Glu Arg Lys Ser Asp
65　　　　　　　　　70　　　　　　　　　75　　　　　　　　　80

Gly Pro Asn Thr Thr Ala Gly Ile Gln Val Leu Gln Glu Val Ser Met
　　　　　　　　　85　　　　　　　　　90　　　　　　　　　95

Ser Arg Tyr Ile Pro His Pro Phe Leu Val Val Ser Val Thr Leu Thr
　　　　　　　　　100　　　　　　　　　105　　　　　　　　　110

Ser Val Ser Thr Glu Asn Gly Ile Thr Leu Lys Met Pro Gln Gln Ala
　　　　　　　　　115　　　　　　　　　120　　　　　　　　　125

Arg Gly Ala Glu Ser Ile Met Leu Asn Leu Ala Gly Gln Leu Ile Met
　　　　　　　　　130　　　　　　　　　135　　　　　　　　　140

Met Gln Arg Asp Arg Ser Gly Pro Gln Ile Arg Glu Lys Asp Ser Asn
145　　　　　　　　　150　　　　　　　　　155　　　　　　　　　160

Pro Asn Asn Gln Arg Lys Leu Leu Pro Phe Cys Pro Pro Val Val Leu
　　　　　　　　　165　　　　　　　　　170　　　　　　　　　175

Ala Gln Ser Val Glu Asn Val Trp Thr Thr Cys Arg Ala Asn Lys Gln
　　　　　　　　　180　　　　　　　　　185　　　　　　　　　190

Lys Arg His Leu Leu Glu Ala Leu Trp Leu Ser Cys Gly Gly Ala Gly
　　　　　　　　　195　　　　　　　　　200　　　　　　　　　205

Met Lys Val Trp Leu Pro Leu Phe Pro Arg Asp His Arg Lys Pro His
　　　　　　　　　210　　　　　　　　　215　　　　　　　　　220

Ser Phe Leu Ser Gln Arg Ile Met Leu Pro Phe His Ile Asn Ile Tyr
225　　　　　　　　　230　　　　　　　　　235　　　　　　　　　240

Pro Leu Ala Val Leu Phe Glu Asp Ala Leu Val Leu Gly Ala Val Asn

```
                    245            250            255
Asp Thr Leu Leu Tyr Asp Ser Leu Tyr Thr Arg Asn Asn Ala Arg Glu
          260            265            270
Gln Leu Glu Val Leu Phe Pro Phe Cys Val Val Glu Arg Thr Ser Gln
          275            280            285
Ile Tyr Leu His His Ile Leu Arg Gln Leu Leu Val Arg Asn Leu Gly
          290            295            300
Glu Gln Ala Leu Leu Leu Ala Gln Ser Cys Ala Thr Leu Pro Tyr Phe
305            310            315            320
Pro His Val Leu Glu Leu Met Leu His Glu Val Leu Glu Glu Glu Ala
               325            330            335
Thr Ser Arg Glu Pro Ile Pro Asp Pro Leu Leu Pro Thr Val Ala Lys
          340            345            350
Phe Ile Thr Glu Phe Pro Leu Phe Leu Gln Thr Val Val His Cys Ala
          355            360            365
Arg Lys Thr Glu Tyr Ala Leu Trp Asn Tyr Leu Phe Ala Ala Val Gly
     370            375            380
Asn Pro Lys Asp Leu Phe Glu Glu Cys Leu Met Ala Gln Asp Leu Asp
385            390            395            400
Thr Ala Ala Ser Tyr Leu Ile Ile Leu Gln Asn Met Glu Val Pro Ala
               405            410            415
Ile Ser Arg Gln His Ala Thr Leu Leu Phe Asn Thr Ala Leu Glu Gln
          420            425            430
Gly Lys Trp Asp Leu Cys Arg His Met Ile Arg Phe Leu Lys Ala Ile
          435            440            445
Gly Ser Gly Glu Ser Glu Thr Pro Pro Ser Thr Pro Thr Ala Gln Glu
          450            455            460
Pro Ser Ser Ser Gly Gly Phe Glu Phe Phe Arg Asn Arg Ser Ile Ser
465            470            475            480
```

●

Leu Ser Gln Ser Ala Glu Asn Val Pro Ala Ser Lys Phe Ser Leu Gln
　　　　　　　　485　　　　　　　490　　　　　　　495

Lys Thr Leu Ser Met Pro Ser Gly Pro Ser Gly Lys Arg Trp Ser Lys
　　　　　　500　　　　　　　505　　　　　　　510

Asp Ser Asp Cys Ala Glu Asn Met Tyr Ile Asp Met Met Leu Trp Arg
　　　　　515　　　　　　　520　　　　　　　525

His Ala Arg Arg Leu Leu Glu Asp Val Arg Leu Lys Asp Leu Gly Cys
　　　　530　　　　　　　535　　　　　　　540

Phe Ala Ala Gln Leu Gly Phe Glu Leu Ile Ser
545　　　　　　　550　　　　　　　555

<210> 2208

<211> 1235

<212> PRT

<213> Homo sapiens

<400> 2208

Met Asp His Thr Ala Ser Gln Asn Ala Gln Asp Leu Ile Gly Ile Pro
1　　　　　　　5　　　　　　　10　　　　　　　15

His Leu Gly Val Ser Gly Ser Ser Thr Lys Trp His Ser Glu Leu Ser
　　　　　　20　　　　　　　25　　　　　　　30

Pro Thr Glu Gly Pro His Ser Ala Gly Ser Ser Thr Pro Gly Phe Leu
　　　　　　35　　　　　　　40　　　　　　　45

Ser Pro Met Ala Glu Leu Ser His Pro Ser Pro Pro Pro Ala Leu
　　　　50　　　　　　　55　　　　　　　60

Gly Ser Leu Leu Gln Leu Pro Asp Gly Ser Pro Ser Trp Ser Met Leu
65　　　　　　　70　　　　　　　75　　　　　　　80

Glu Val Ala Ser Gly Pro Ala Ser Thr Gln Gln Ile Lys Ala Gly Val

```
                85                  90                  95
Pro Gly Arg Val His Asn Gly Val Ser Leu Pro Thr Phe Lys Asn Thr
                100                 105                 110
Glu Thr Ala Thr His Glu Ala Glu Pro Pro Leu Phe Gln Thr Ala Glu
                115                 120                 125
Ser Gly Ala Ile Glu Met Thr Ser Arg Lys Leu Ala Ser Ala Thr Ala
                130                 135                 140
Asn Asp Ser Ala Asn Pro Leu His Leu Ser Ala Ala Pro Glu Asn Ser
145                 150                 155                 160
Arg Gly Pro Ala Leu Ser Ala Glu His Thr Ser Ser Leu Val Pro Ser
                165                 170                 175
Leu His Ile Thr Thr Leu Gly Gln Glu Gln Ala Ile Leu Ser Gly Ala
                180                 185                 190
Val Pro Ala Ser Pro Ser Thr Gly Thr Ala Asp Phe Pro Ser Ile Leu
                195                 200                 205
Thr Phe Leu Gln Pro Thr Glu Asn His Ala Ser Pro Ser Pro Val Pro
210                 215                 220
Glu Met Pro Thr Leu Pro Ala Glu Gly Ser Asp Gly Ser Pro Pro Ala
225                 230                 235                 240
Thr Arg Asp Leu Leu Leu Ser Ser Lys Val Pro Asn Leu Leu Ser Thr
                245                 250                 255
Ser Trp Thr Phe Pro Arg Trp Lys Lys Asp Ser Val Thr Ala Ile Leu
                260                 265                 270
Gly Lys Asn Glu Glu Ala Asn Val Thr Ile Pro Leu Gln Ala Phe Pro
                275                 280                 285
Arg Lys Glu Val Leu Ser Leu His Thr Val Asn Gly Phe Val Ser Asp
290                 295                 300
Phe Ser Thr Gly Ser Val Ser Ser Pro Ile Ile Thr Ala Pro Arg Thr
305                 310                 315                 320
```

Asn Pro Leu Pro Ser Gly Pro Pro Leu Pro Ser Ile Leu Ser Ile Gln
                325   330   335

Ala Thr Gln Thr Val Phe Pro Ser Leu Gly Phe Ser Ser Thr Lys Pro
                340   345   350

Glu Ala Tyr Ala Ala Ala Val Asp His Ser Gly Leu Pro Ala Ser Ala
                355   360   365

Ser Lys Gln Val Arg Ala Ser Pro Ser Ser Met Asp Val Tyr Asp Ser
                370   375   380

Leu Thr Ile Gly Asp Met Lys Lys Pro Ala Thr Thr Asp Val Phe Trp
385   390   395   400

Ser Ser Leu Ser Ala Glu Thr Gly Ser Leu Ser Thr Glu Ser Ile Ile
                405   410   415

Ser Gly Leu Gln Gln Gln Thr Asn Tyr Asp Leu Asn Gly His Thr Ile
                420   425   430

Ser Thr Thr Ser Trp Glu Thr His Leu Ala Pro Thr Ala Pro Pro Asn
                435   440   445

Gly Leu Thr Ser Ala Ala Asp Ala Ile Lys Ser Gln Asp Phe Lys Asp
                450   455   460

Thr Ala Gly His Ser Val Thr Ala Glu Gly Phe Ser Ile Gln Asp Leu
465   470   475   480

Val Leu Gly Thr Ser Ile Glu Gln Pro Val Gln Gln Ser Asp Met Thr
                485   490   495

Met Val Gly Ser His Ile Asp Leu Trp Pro Thr Ser Asn Asn Asn His
                500   505   510

Ser Arg Asp Phe Gln Thr Ala Glu Val Ala Tyr Tyr Ser Pro Thr Thr
                515   520   525

Arg His Ser Val Ser His Pro Gln Leu Gln Leu Pro Asn Gln Pro Ala
                530   535   540

His Pro Leu Leu Leu Thr Ser Pro Gly Pro Thr Ser Thr Gly Ser Leu

```
      545                     550                     555                     560
Gln Glu Met Leu Ser Asp Gly Thr Asp Thr Gly Ser Glu Ile Ser Ser
                    565                     570                     575
Asp Ile Asn Ser Ser Pro Glu Arg Asn Ala Ser Thr Pro Phe Gln Asn
                    580                     585                     590
Ile Leu Gly Tyr His Ser Ala Ala Glu Ser Ser Ile Ser Thr Ser Val
                    595                     600                     605
Phe Pro Arg Thr Ser Ser Arg Val Leu Arg Ala Ser Gln His Pro Lys
                    610                     615                     620
Lys Trp Thr Gly Ala Ala Thr Asn Ala Ala Asp Thr Val Ser Ser Lys
625                     630                     635                     640
Val Gln Pro Thr Ala Ala Ala Ala Val Thr Leu Phe Leu Arg Lys Ser
                    645                     650                     655
Ser Pro Pro Ala Leu Ser Ala Ala Leu Val Ala Lys Gly Thr Ser Ser
                    660                     665                     670
Ser Pro Leu Ala Val Ala Ser Gly Pro Ala Lys Ser Ser Ser Met Thr
                    675                     680                     685
Thr Leu Ala Lys Asn Val Thr Asn Lys Ala Ala Ser Gly Pro Lys Arg
                    690                     695                     700
Thr Pro Gly Ala Val His Thr Ala Phe Pro Phe Thr Pro Thr Tyr Met
705                     710                     715                     720
Tyr Ala Arg Thr Gly His Thr Thr Ser Thr His Thr Ala Met Gln Gly
                    725                     730                     735
Asn Met Asp Thr Ala Ser Gly Leu Leu Ser Thr Thr Tyr Leu Pro Arg
                    740                     745                     750
Lys Pro Gln Ala Met His Thr Gly Leu Pro Asn Pro Thr Asn Leu Glu
                    755                     760                     765
Met Pro Arg Ala Ser Thr Pro Arg Pro Leu Thr Val Thr Ala Ala Leu
                    770                     775                     780
```

Thr Ser Ile Thr Ala Ser Val Lys Ala Thr Arg Leu Pro Pro Leu Arg
785　　　　　　　　790　　　　　　　795　　　　　　　800

Ala Glu Asn Thr Asp Ala Val Leu Pro Ala Ala Ser Ala Ala Val Val
　　　　　　　　805　　　　　　　810　　　　　　　815

Thr Thr Gly Lys Met Ala Ser Asn Leu Glu Cys Gln Met Ser Ser Lys
　　　　　　　　820　　　　　　　825　　　　　　　830

Leu Leu Val Lys Thr Val Leu Phe Leu Thr Gln Arg Arg Val Gln Ile
　　　　　　　　835　　　　　　　840　　　　　　　845

Ser Glu Ser Leu Lys Phe Ser Ile Ala Lys Gly Leu Thr Gln Ala Leu
　　　　　　　　850　　　　　　　855　　　　　　　860

Arg Lys Ala Phe His Gln Asn Asp Val Ser Ala His Val Asp Ile Leu
865　　　　　　　　870　　　　　　　875　　　　　　　880

Glu Tyr Ser His Asn Val Thr Val Gly Tyr Tyr Ala Thr Lys Gly Lys
　　　　　　　　885　　　　　　　890　　　　　　　895

Leu Val Tyr Leu Pro Ala Val Val Ile Glu Met Leu Gly Val Tyr Gly
　　　　　　　　900　　　　　　　905　　　　　　　910

Val Ser Asn Val Thr Ala Asp Leu Lys Gln His Thr Pro His Leu Gln
　　　　　　　　915　　　　　　　920　　　　　　　925

Ser Val Ala Val Leu Ala Ser Pro Trp Asn Pro Gln Pro Ala Gly Tyr
　　　　　　　　930　　　　　　　935　　　　　　　940

Phe Gln Leu Lys Thr Val Leu Gln Phe Val Ser Gln Ala Asp Asn Ile
945　　　　　　　　950　　　　　　　955　　　　　　　960

Gln Ser Cys Lys Phe Ala Gln Thr Met Glu Gln Arg Leu Gln Lys Ala
　　　　　　　　965　　　　　　　970　　　　　　　975

Phe Gln Asp Ala Glu Arg Lys Val Leu Asn Thr Lys Ser Asn Leu Thr
　　　　　　　　980　　　　　　　985　　　　　　　990

Ile Gln Ile Val Ser Thr Ser Asn Ala Ser Gln Ala Val Thr Leu Val
　　　　　　　　995　　　　　　　1000　　　　　　　1005

Tyr Val Val Gly Asn Gln Ser Thr Phe Leu Asn Gly Thr Val Ala Ser

```
            1010                 1015                  1020
Ser Leu Leu Ser Gln Leu Ser Ala Glu Leu Val Gly Phe Tyr Leu Thr
1025                 1030                  1035                  1040
Tyr Pro Pro Leu Thr Ile Ala Glu Pro Leu Glu Tyr Pro Asn Leu Asp
                  1045                 1050                  1055
Ile Ser Glu Thr Thr Arg Asp Tyr Trp Val Ile Thr Val Leu Gln Gly
              1060                 1065                  1070
Val Asp Asn Ser Leu Val Gly Leu His Asn Gln Ser Phe Ala Arg Val
              1075                 1080                  1085
Met Glu Gln Arg Leu Ala Gln Leu Phe Met Met Ser Gln Gln Gln Gly
          1090                 1095                  1100
Arg Arg Phe Lys Arg Ala Thr Thr Leu Gly Ser Tyr Thr Val Gln Met
1105                 1110                  1115                  1120
Val Lys Met Gln Arg Val Pro Gly Pro Lys Asp Pro Ala Glu Leu Thr
                  1125                 1130                  1135
Tyr Tyr Thr Leu Tyr Asn Gly Lys Pro Leu Leu Gly Thr Ala Ala Ala
              1140                 1145                  1150
Lys Ile Leu Ser Thr Ile Asp Ser Gln Arg Met Ala Leu Thr Leu His
              1155                 1160                  1165
His Val Val Leu Leu Gln Ala Asp Pro Val Val Lys Asn Pro Pro Asn
          1170                 1175                  1180
Asn Leu Trp Ile Ile Ala Ala Val Leu Ala Pro Ile Ala Val Val Thr
1185                 1190                  1195                  1200
Val Ile Ile Ile Ile Ile Thr Ala Val Leu Cys Arg Lys Asn Lys Asn
                  1205                 1210                  1215
Asp Phe Lys Pro Asp Thr Met Ile Asn Leu Pro Gln Arg Ala Lys Gln
              1220                 1225                  1230
Val Ala Gln
          1235
```

<210> 2209

<211> 155

<212> PRT

<213> Homo sapiens

<400> 2209

Met Ser Ile Thr Ser Thr Val Lys Ala Ser Leu Cys Ser Gly Val Val
1   5   10   15

Ser His Phe Pro Lys Ile Asn Thr Val Asn Thr Asp Glu His Cys Cys
              20   25   30

Leu Tyr Val Met Ser Glu Ile Pro His Pro Phe Met His Lys Tyr Val
              35   40   45

Cys Ile Tyr Ala Tyr Thr Phe Thr His Ile Tyr Arg His Leu Phe Ile
           50   55   60

Tyr Thr Cys Lys Tyr Val Tyr Tyr Ile His Val Tyr Cys Ile Gly Leu
65   70   75   80

Glu Lys Ser Lys His Phe Lys Ser Met Leu Ile Ile Cys Ile Cys Leu
              85   90   95

Val Asn Thr Ser Arg Gln Arg Gln Val Lys Gln Arg Ser Ser Ile Tyr
              100   105   110

Phe Phe Val Ser Thr Ile Ala Arg Leu Arg Ser Val Met Ala Leu Leu
              115   120   125

Gln Leu His Leu Ala Phe Ser Ile Thr Cys Val Ile Lys Phe Met Thr
           130   135   140

Lys Ser Ser Cys Asn Cys Leu Cys Cys Leu Pro
145   150   155

<210> 2210

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2210

Met Thr Asp Leu Trp Thr Arg Gly Phe Pro Ala Ser Pro Leu Ile Pro
1   5   10   15

Ala Asp Leu Trp Ala Ser Phe His Gly Tyr Arg Arg Lys Ser Lys Val
                20   25   30

Ser Leu Gln Ala Ala Val Pro Leu Gly Ser Gln Leu Cys Pro Ser Phe
            35   40   45

Ser Ser Pro Gln Gly Gly Cys Pro Ile Pro Glu Pro Pro Trp Ala Pro
        50   55   60

Ala Ser Ala Gly Pro Tyr Val Cys Gly Leu Gly Phe Cys Pro Pro Val
65   70   75   80

Leu Val Leu Ile Cys Ser Leu Trp Phe Cys Ser Phe Phe His Pro Pro
                85   90   95

Thr His Leu Gly Pro Ser Ser His
                100

<210> 2211

<211> 104

<212> PRT

<213> Homo sapiens

<400> 2211

Met Ser Ser Asp Gln Ala Gln His Cys His Gln Asp Asp Lys Gly Gln
1   5   10   15

Gly Val Arg Ser Gln Pro Pro Pro Thr Phe Leu Ser Ser Gly Leu Arg
                20   25   30

Arg Arg Lys Gly Pro Thr Lys Thr Pro Glu Pro Glu Ser Ser Glu Ala
                35   40   45

Pro Gln Asp Pro Leu Asn Trp Phe Gly Ile Leu Val Pro His Ser Leu
        50   55   60

Arg Gln Ala Gln Ala Ser Phe Arg Asp Gly Glu Trp Thr Val Leu Phe
    65   70   75   80

Gly Ser Val Ala Leu Arg Pro Ser Ile His Arg Glu His Leu Ser Thr
                    85   90   95

Ala Ala Met Ala Gly Val Ser Leu
                    100

<210> 2212

<211> 120

<212> PRT

<213> Homo sapiens

<400> 2212

Met Arg Arg Ala Gly Ser Thr Arg Cys Ser Leu Ala Pro Gly Arg Lys
1   5   10   15

Ala Glu Glu Pro Gly Asn His Val Pro Ser Trp Lys Glu Ala Leu Arg
                20   25   30

Thr Leu Leu Pro Arg Asn Pro Glu Gln Arg Leu Ala Gly Leu Gln Glu
                35   40   45

Gln Ser Arg Val Arg Ala Val Ser Trp Gln Arg Ile Lys Tyr Pro Gly

```
              50                    55                    60
His Ile Glu Glu Thr Cys Glu Asp Ser Asn Gly Glu Gln Phe Glu Ser
 65                    70                    75                    80
Glu Lys Pro Val Leu Glu Ala Arg Lys Phe Lys Ile Lys Val Leu Ala
                      85                    90                    95
Ser Ser Val Ser Ala Glu Asp Leu Ile Ser Leu Leu Ser Arg Trp His
                     100                   105                   110
Leu Val Ala Leu Pro Ser Arg Glu
                     115                   120
```

<210> 2213

<211> 106

<212> PRT

<213> Homo sapiens

<400> 2213

```
Met Ser His His Ala Arg Leu Ser Leu Leu Asn Phe Arg Thr Ile Thr
 1                     5                    10                    15
Val Tyr Phe Tyr Phe Leu Asn Tyr His Ile Val Lys Leu Ala Leu Trp
                      20                    25                    30
Leu Cys Ser Phe Met Cys Phe Asp Val Cys Ile Asp Gly Cys His Asn
                      35                    40                    45
Gln Glu Arg Glu His Ser Pro Lys Pro Arg Asp Val His Gly Ala Ile
 50                    55                    60
Leu His Ser Met Phe Leu Gly Ser His Ser Ala Pro Ser Pro Lys His
 65                    70                    75                    80
Gly Ala Pro Ala Cys Arg Cys His Arg Arg Gln His His Gly Leu Leu
                      85                    90                    95
```

Asn Thr Val Arg His Ser Ser Ser Lys Gly
            100   105

<210> 2214

<211> 108

<212> PRT

<213> Homo sapiens

<400> 2214

Met Tyr Ser Leu Asn Gln Ser Phe Phe Cys Pro Gln Leu Glu Ile Phe
 1   5   10   15

Leu Ala Gln Arg Ala Val Glu Leu Ser Glu Glu Ala Asp Val Leu Ser
            20   25   30

Val Ser Gln Phe Gln Leu Ala Pro Ala Ile Leu Gln Gly Gln Thr Lys
            35   40   45

Glu Lys Met Val Thr Met Val Ser Val Leu Glu Asp Leu Ile Gly Lys
        50   55   60

Leu Thr Ser Leu Gln Leu Gln His Leu Phe Met Ile Leu Ala Ser Pro
 65   70   75   80

Arg Ser Gly Phe Pro Leu Met Gln Gly Ser Ala Ile Leu Ser Ser Ser
                85   90   95

Ala Ser Leu Tyr Ser Ser Ser Cys Ser Met Thr Pro
            100   105

<210> 2215

<211> 109

<212> PRT

<213> Homo sapiens

<400> 2215

Met His His Ser Trp Leu Ile His Pro Leu Leu Asp Gly His Leu Ala
1   5   10   15

Cys Phe Gln Val Phe Ala Val Ser Asp Thr Ala Ser Ile Asp Cys Phe
                20   25   30

Leu Ser Val Ser Glu Pro Leu Ser Arg Leu Leu Gly Lys Gln Cys Pro
                35   40   45

Ser Phe Phe Pro Ser Phe Trp Ile Gly Phe Leu Pro Ala Glu Val Leu
        50   55   60

Gly Val Trp Phe Gly His Gly Cys Gly Ser Thr Trp Ser Leu Ser Ser
65   70   75   80

Gly Leu Ile Gln Arg Gly Arg Ser Gly Glu Glu Gly Ser Val Gln Gly
                    85   90   95

Lys Ser Arg Leu Gly His Gly Val Ser Leu Val Gly Gln
                100   105

<210> 2216

<211> 101

<212> PRT

<213> Homo sapiens

<400> 2216

Met Glu Ile Gln Met Ser Lys Ser Ser Gln Asn Ser Lys Leu Leu Ile
1   5   10   15

Pro Val Leu Arg Leu Cys Ser Tyr Ser Asp Glu Ser Val Val Leu Val
                20   25   30

Arg Gly Leu Ala Arg Arg Pro Val Gly Trp Asn Gly Ala Arg Lys Val
            35   40   45

Asn His Lys Leu Leu Val His Arg Gly Thr Arg Ile Ile Gln Gly Gly
        50   55   60

Gly Ile Val Leu Ser Thr Gly Gly Ser Gly Asn Arg Val Phe Thr Gly
65   70   75   80

Lys Met Val Asn Val Asn Pro Cys Ile Ile Cys Lys Lys Leu Phe Glu
                    85   90   95

Thr Gly His Lys Asn
                100

<210> 2217

<211> 809

<212> PRT

<213> Homo sapiens

<400> 2217

Met Leu Tyr Pro Ala Leu Ala Lys Glu Ser Gly Tyr Ile Ala Pro Gln
1   5   10   15

Gly Ala Cys Asn Lys Met Ala Thr Ile Asp Glu Asn Gly Asn Gln Asn
            20   25   30

Gly Ser Gly Arg Pro Gly Phe Ala Phe Cys Gln Pro Leu Glu His Asp
            35   40   45

Leu Leu Ser Pro Val Glu Lys Lys Pro Glu Ala Thr Ala Lys Tyr Val
        50   55   60

Pro Ser Lys Val His Phe Cys Ser Val Pro Glu Asn Glu Glu Asp Ala
65   70   75   80

Ser Leu Lys Arg His Leu Thr Pro Pro Gln Gly Asn Ser Pro His Ser

```
                    85                  90                  95
Asn Glu Arg Lys Ser Thr His Ser Asn Lys Pro Ser Ser His Pro His
                   100                 105                 110
Ser Leu Lys Cys Pro Gln Ala Gln Ala Trp Gln Ala Gly Glu Asp Lys
                   115                 120                 125
Arg Ser Ser Arg Leu Ser Glu Pro Trp Glu Gly Asp Phe Gln Glu Asp
               130                 135                 140
His Asn Ala Asn Leu Trp Arg Arg Leu Glu Arg Glu Gly Leu Gly Gln
145                 150                 155                 160
Ser Leu Ser Gly Asn Phe Gly Lys Thr Lys Ser Ala Phe Ser Ser Leu
                   165                 170                 175
Gln Asn Ile Pro Glu Ser Leu Arg Arg His Ser Ser Leu Glu Leu Gly
                   180                 185                 190
Arg Gly Thr Gln Glu Gly Tyr Pro Gly Gly Arg Pro Thr Cys Ala Val
                   195                 200                 205
Asn Thr Lys Ala Glu Asp Pro Gly Arg Lys Ala Ala Pro Asp Leu Gly
               210                 215                 220
Ser His Leu Asp Arg Gln Val Ser Tyr Pro Arg Pro Glu Gly Arg Thr
225                 230                 235                 240
Gly Ala Ser Ala Ser Phe Asn Ser Thr Asp Pro Ser Pro Glu Glu Pro
                   245                 250                 255
Pro Ala Pro Ser His Pro His Thr Ser Ser Leu Gly Arg Arg Gly Pro
                   260                 265                 270
Gly Pro Gly Ser Ala Ser Ala Leu Gln Gly Phe Gln Tyr Gly Lys Pro
                   275                 280                 285
His Cys Ser Val Leu Glu Lys Val Ser Lys Phe Glu Gln Arg Glu Gln
                   290                 295                 300
Gly Ser Gln Arg Pro Ser Val Gly Gly Ser Gly Phe Gly His Asn Tyr
305                 310                 315                 320
```

Arg Pro His Arg Thr Val Ser Thr Ser Ser Thr Ser Gly Asn Asp Phe
     325   330   335

Glu Glu Thr Lys Ala His Ile Arg Phe Ser Glu Ser Ala Glu Pro Leu
     340   345   350

Gly Asn Gly Glu Gln His Phe Lys Asn Gly Glu Leu Lys Leu Glu Glu
     355   360   365

Ala Ser Arg Gln Pro Cys Gly Gln Gln Leu Ser Gly Gly Ala Ser Asp
     370   375   380

Ser Gly Arg Gly Pro Gln Arg Pro Asp Ala Arg Leu Leu Arg Ser Gln
385   390   395   400

Ser Thr Phe Gln Leu Ser Ser Glu Pro Glu Arg Glu Pro Glu Trp Arg
     405   410   415

Asp Arg Pro Gly Ser Pro Glu Ser Pro Leu Leu Asp Ala Pro Phe Ser
     420   425   430

Arg Ala Tyr Arg Asn Ser Ile Lys Asp Ala Gln Ser Arg Val Leu Gly
     435   440   445

Ala Thr Ser Phe Arg Arg Arg Asp Leu Glu Leu Gly Ala Pro Val Ala
     450   455   460

Ser Arg Ser Trp Arg Pro Arg Pro Ser Ser Ala His Val Gly Leu Arg
465   470   475   480

Ser Pro Glu Ala Ser Ala Ser Ala Ser Pro His Thr Pro Arg Glu Trp
     485   490   495

His Ser Val Thr Pro Ala Glu Gly Asp Leu Ala Arg Pro Val Pro Pro
     500   505   510

Ala Ala Arg Arg Gly Ala Arg Arg Leu Thr Pro Glu Gln Lys Lys
     515   520   525

Arg Ser Tyr Ser Glu Pro Glu Lys Met Asn Glu Val Gly Ile Val Glu
     530   535   540

Glu Ala Glu Pro Ala Pro Leu Gly Pro Gln Arg Asn Gly Met Arg Phe

```
        545                 550                 555                 560
Pro Glu Ser Ser Val Ala Asp Arg Arg Arg Leu Phe Glu Arg Asp Gly
                    565                 570                 575
Lys Ala Cys Ser Thr Leu Ser Leu Ser Gly Pro Glu Leu Lys Gln Phe
                    580                 585                 590
Gln Gln Ser Ala Leu Ala Asp Tyr Ile Gln Arg Lys Thr Gly Lys Arg
                    595                 600                 605
Pro Thr Ser Ala Ala Gly Cys Ser Leu Gln Glu Pro Gly Pro Leu Arg
                    610                 615                 620
Glu Arg Ala Gln Ser Ala Tyr Leu Gln Pro Gly Pro Ala Ala Leu Glu
625                 630                 635                 640
Gly Ser Gly Leu Ala Ser Ala Ser Ser Leu Ser Ser Leu Arg Glu Pro
                    645                 650                 655
Ser Leu Gln Pro Arg Arg Glu Ala Thr Leu Leu Pro Ala Thr Val Ala
                    660                 665                 670
Glu Thr Gln Gln Ala Pro Arg Asp Arg Ser Ser Ser Phe Ala Gly Gly
                    675                 680                 685
Arg Arg Leu Gly Glu Arg Arg Arg Gly Asp Leu Leu Ser Gly Ala Asn
                    690                 695                 700
Gly Gly Thr Arg Gly Thr Gln Arg Gly Asp Glu Thr Pro Arg Glu Pro
705                 710                 715                 720
Ser Ser Trp Gly Ala Arg Ala Gly Lys Ser Met Ser Ala Glu Asp Leu
                    725                 730                 735
Leu Glu Arg Ser Asp Val Leu Ala Gly Pro Val His Val Arg Ser Arg
                    740                 745                 750
Ser Ser Pro Ala Thr Ala Asp Lys Arg Gln Val Arg Ala Thr Ser Lys
                    755                 760                 765
Ser Trp Pro Arg Thr Val Pro Ser Ser Leu Glu Ala Leu Val Gly Leu
                    770                 775                 780
```

Pro Asn Pro Pro His Ser His Pro Leu Ser Gln Phe Ser Phe Pro Cys
785   790   795   800
Asp Tyr Arg Lys Val Ala Phe Val Phe
                    805

<210> 2218

<211> 138

<212> PRT

<213> Homo sapiens

<400> 2218

Met Val Ile Phe Gln Phe Ile Ser Cys Asp Leu Ser Ala Val Phe Asn
1   5   10   15
Val Leu Asn Phe Phe Ile Phe Arg Asn Arg Val Ser Leu Cys Cys Pro
                    20   25   30
Cys Trp Ser Gln Thr Pro Gly Leu Lys Cys Ser Cys Leu Gly Leu Pro
                    35   40   45
Lys His Trp Asp Tyr Arg His Glu Pro Leu Leu Pro Gly Leu Cys Leu
            50   55   60
Met Phe Leu Thr Gly Leu Leu Leu Asn Ser Phe Asn Leu Ala Ser Leu
65   70   75   80
Ile Pro Leu Ala Pro Val Ser Leu Leu Pro Pro Arg Glu Leu Leu Cys
                    85   90   95
Pro Pro Leu Phe Pro Asn Tyr Gly His Val Ile Lys Ala Phe Phe Pro
                    100   105   110
Arg Pro Leu Leu Pro Arg Cys Asp Tyr Leu His Ser Ser Asp Leu Ile
            115   120   125
Tyr Thr Pro Asp Leu Leu Gln Thr Val Phe

130   135

<210> 2219

<211> 179

<212> PRT

<213> Homo sapiens

<400> 2219

Met Leu Asn Trp Ile Ile Arg Leu Gln Ala Ile Leu Glu Ile Ile Thr
1   5   10   15

Asn Glu Thr Gly Arg Ala Leu Thr Val Leu Ala Trp Gln Glu Thr Gln
                20   25   30

Met Arg Asn Ala Ile Tyr Gln Asn Arg Leu Ala Leu Asp Tyr Leu Leu
            35   40   45

Val Ala Glu Gly Gly Val Cys Gly Lys Phe Asn Leu Thr Asn Cys Cys
        50   55   60

Leu Gln Ile Asn Asp Gln Gly Gln Val Val Lys Asn Ile Val Arg Asp
65   70   75   80

Met Thr Lys Val Ala His Val Pro Val Gln Val Trp His Glu Phe Asn
                    85   90   95

Pro Glu Ser Leu Phe Glu Lys Trp Phe Pro Ala Ile Ala Gly Phe Lys
                100   105   110

Thr Leu Ile Val Gly Gly Leu Leu Val Ile Gly Ala Cys Leu Leu Leu
            115   120   125

Pro Cys Val Leu Pro Leu Leu Phe Gln Met Ile Lys Gly Phe Val Ala
        130   135   140

Thr Leu Val His Gln Lys Thr Ser Ala His Val Cys Tyr Ile Asn Gln
145   150   155   160

Tyr Arg Ser Ile Ser Pro Ile Asp Ser Lys Ser Lys Asp Glu Ser Glu
165   170   175

Asn Ser His

<210> 2220

<211> 181

<212> PRT

<213> Homo sapiens

<400> 2220

Met Gln Arg Thr Gly Phe Gln Lys Pro Gln Lys Leu Glu Glu Pro His
1   5   10   15

Arg His Ala Leu Cys Pro Pro Thr Val Ser Gly Ala Ser Ser Asn Pro
                20   25   30

Cys Ser Glu Thr Tyr His Gly Lys Phe Ala Asn Ser Glu Val Glu Val
                35   40   45

Lys Ser Ile Val Asp Phe Val Lys Asp His Gly Asn Ile Lys Ala Phe
        50   55   60

Ile Ser Ile His Ser Tyr Ser Gln Leu Leu Met Tyr Pro Tyr Gly Tyr
65   70   75   80

Lys Thr Glu Pro Val Pro Asp Gln Asp Glu Leu Asp Leu Leu Ser Lys
                85   90   95

Ala Ala Val Thr Ala Leu Ala Ser Leu Tyr Gly Thr Lys Phe Asn Tyr
                100   105   110

Gly Ser Ile Ile Lys Ala Ile Tyr Gln Ala Ser Gly Ser Thr Ile Asp
        115   120   125

Trp Thr Tyr Ser Gln Gly Ile Lys Tyr Ser Phe Thr Phe Glu Leu Arg

```
         130                  135                  140
Asp Thr Gly Arg Tyr Gly Phe Leu Leu Pro Ala Ser Gln Ile Ile Pro
145                  150                  155                  160
Thr Ala Lys Glu Thr Trp Leu Ala Leu Leu Thr Ile Met Glu His Thr
                    165                  170                  175
Leu Asn His Pro Tyr
                    180
```

<210> 2221

<211> 223

<212> PRT

<213> Homo sapiens

<400> 2221

```
Met Gly Ala Gly Gly Gly Ser Gln His Gly Leu Arg Gln Val Ser Arg
 1                   5                  10                  15
Met Glu Met Gly Gly Gly Pro Ser Gly Ser Ala Met Cys Ser Glu Ala
                    20                  25                  30
Gly Val Gly Val Arg Thr Pro Pro Gln Gly Ala Gly Ala Gln Ser Trp
          35                  40                  45
Leu Gly Ser Leu Pro Gly Cys Gly Ala Gly Ala Gly Pro Trp Ala Ala
     50                  55                  60
Leu Gly Arg Arg Arg Ile Gly Arg Leu Ala Leu Trp Ala Ala Pro Arg
65                  70                  75                  80
Arg Ser Gly Gly Pro Arg Arg Thr Ser Glu Val Gly Gly Ser Arg Pro
                    85                  90                  95
His Arg Gly Met Phe Trp Arg Ser Arg Glu Gln Ser Pro Arg Ala Arg
               100                 105                 110
```

Gly Gly Arg Gly Thr Val Gln Val Pro Gly Ala Gly Val Ser Gly Thr
        115   120   125

Val Pro Gly Thr Arg Trp Ser Ala Val Gly Pro Cys Gly Glu Arg Arg
        130   135   140

Pro Leu Ala Arg Gly Arg Arg Thr Glu Ala Gly Gly Glu Gly Glu Pro
145   150   155   160

Gly Arg Gly Thr Val Val Pro Gly Ala Ala Leu Arg Val Gly Thr Trp
                165   170   175

Arg Ser Cys Ala Pro Trp Arg Gly Gly Gly Glu Ala Gly Glu Arg Pro
                180   185   190

Trp Leu Leu Pro Pro Gly Val Pro Arg Val Thr Ala Ala Ala Ala Ile
        195   200   205

Leu Pro Asn Thr Asp Pro Pro Pro Ala Pro Ala Asp Ser Gly Val
        210   215   220

<210> 2222

<211> 107

<212> PRT

<213> Homo sapiens

<400> 2222

Met Phe Leu Thr Cys Ser Trp Gly Phe Ser Gln Gln Tyr Ser Gly His
1   5   10   15

Phe Pro Ser Cys Gly Ser Thr Val Cys Asn Ala Gly Leu Gln Val Ala
            20   25   30

Glu Glu Asp Gly Ala Glu Glu Ser His Met Gly Val Cys Leu Ala Gln
        35   40   45

Gly Gly Ser Gly Cys Ala Phe Leu Leu Pro Thr Ser Leu Thr Arg Pro

```
              50                    55                    60
His Pro Thr Ala Arg Glu Ala Gly Glu Cys Gly Leu Asp Leu Asn Pro
 65                    70                    75                    80
Arg Arg Arg Asn Gly Phe Leu Asn Ser Trp Pro Phe Thr Asp Thr Lys
                        85                    90                    95
Arg Val Lys Val Thr Cys Arg Gly Asp Glu Phe
                       100                   105
```

<210> 2223

<211> 127

<212> PRT

<213> Homo sapiens

<400> 2223

```
Met Arg Gly His Ala Asp Ser Val Thr Gly Leu Ser Leu Ser Ser Glu
 1               5                   10                    15
Gly Ser Tyr Leu Leu Ser Asn Ala Met Asp Asn Thr Val Arg Val Trp
                20                    25                    30
Asp Val Arg Pro Phe Ala Pro Lys Glu Arg Cys Val Lys Ile Phe Gln
                35                    40                    45
Gly Asn Val His Asn Phe Glu Lys Asn Leu Leu Arg Cys Ser Trp Ser
           50                    55                    60
Pro Asp Gly Ser Lys Ile Ala Ala Gly Ser Ala Asp Arg Phe Val Tyr
 65                    70                    75                    80
Val Trp Asp Thr Thr Ser Arg Arg Ile Leu Tyr Lys Leu Pro Gly His
                       85                    90                    95
Ala Gly Ser Ile Asn Glu Val Ala Phe His Pro Asp Glu Pro Ile Ile
                      100                   105                   110
```

Ile Ser Ala Ser Ser Asp Lys Arg Leu Tyr Met Gly Glu Ile Gln
　　　115　　　　　　　　120　　　　　　　　125

<210> 2224

<211> 114

<212> PRT

<213> Homo sapiens

<400> 2224

Met Arg Ala Phe Leu Pro Ser Ala Arg His Ser Gly Phe Leu Thr Cys
1　　　　　　　5　　　　　　　　10　　　　　　　　15

Thr Leu Thr Ala Arg Gln Asn Leu Gly Val His Lys Lys Asp Leu Arg
　　　　　　20　　　　　　　　25　　　　　　　　30

Trp Asp Met Glu Glu Gln Gly Pro Leu Leu Val Cys Pro Pro Ser Pro
　　　　　35　　　　　　　　40　　　　　　　　45

His Leu His Ser Ser Pro Asn Leu Pro Leu Gln Ser Arg Glu Lys Thr
　　　50　　　　　　　　55　　　　　　　　60

Ser Glu Asn Ile Arg Ser Asp Ser Thr Glu Ala Gln Thr Gly Gln Gln
65　　　　　　　70　　　　　　　　75　　　　　　　　80

Glu Cys Ala Gly His Trp Glu Met Trp Ser Arg Ser Ser His Ser Pro
　　　　　　85　　　　　　　　90　　　　　　　　95

Tyr Arg Pro Pro Thr Asn Tyr Arg Asn Ala Lys Ser Ala Gln Pro Leu
　　　　　　100　　　　　　　105　　　　　　　110

Pro Thr

<210> 2225

<211> 226

<212> PRT

<213> Homo sapiens

<400> 2225

```
Met Tyr Cys Cys Arg Val Thr Ser Gln Ser Leu Gln Leu Pro Tyr Gly
1               5                   10                  15
Pro Ser Val Met Val Gly Phe Ser Pro Leu Gln Lys His Gly Leu Val
                20                  25                  30
Ile Ile Pro Asp Gly Thr Pro Asn Gly Asp Val Ser His Glu Pro Val
            35                  40                  45
Ala Gly Ala Ile Thr Val Val Ser Gln Glu Ala Ala Gln Val Leu Glu
        50                  55                  60
Ser Ala Gly Glu Gly Pro Leu Asp Val Arg Leu Arg Lys Leu Ala Gly
65                  70                  75                  80
Glu Lys Glu Glu Leu Leu Ser Gln Ile Arg Lys Leu Lys Leu Gln Leu
                85                  90                  95
Glu Glu Glu Arg Gln Lys Cys Ser Arg Asn Asp Gly Thr Val Gly Asp
                100                 105                 110
Leu Ala Gly Leu Gln Asn Gly Ser Asp Leu Gln Phe Ile Glu Met Gln
            115                 120                 125
Arg Asp Ala Asn Arg Gln Ile Ser Glu Tyr Lys Phe Lys Leu Ser Lys
        130                 135                 140
Ala Glu Gln Asp Ile Thr Thr Leu Glu Gln Ser Ile Ser Arg Leu Glu
145                 150                 155                 160
Gly Gln Val Leu Arg Tyr Lys Thr Ala Ala Glu Asn Ala Glu Lys Val
                165                 170                 175
Glu Asp Glu Leu Lys Ala Glu Lys Arg Lys Leu Gln Arg Glu Leu Arg
                180                 185                 190
```

Thr Ala Leu Asp Lys Ile Glu Glu Met Glu Met Thr Asn Ser His Leu
　　　　　195　　　　　　　　　200　　　　　　　　　205

Ala Lys Arg Leu Glu Lys Met Lys Ala Asn Arg Thr Ala Leu Leu Ala
　　　　　210　　　　　　　　　215　　　　　　　　　220

Gln Gln
225

<210> 2226

<211> 462

<212> PRT

<213> Homo sapiens

<400> 2226

Met Phe Ile Ser Asp Ala Phe Gly Glu Gly Glu Leu Thr Pro Ile Ala
1　　　　　　　　5　　　　　　　　　10　　　　　　　　　15

Val Asp Thr Thr Ser Gln Arg Asn Ala Ser Pro Asn Ser Glu Pro Cys
　　　　　　　　20　　　　　　　　25　　　　　　　　　30

Ser Ser Asp Ser Val Ser Glu Pro Glu Cys Thr Thr Asp Ser Ser Ser
　　　　　　　35　　　　　　　　　40　　　　　　　　　45

Ser Lys Glu His Thr Ser Ser Ser Ala Ile Pro Gly Gly Val Asp Ile
　　　　　50　　　　　　　　　55　　　　　　　　　60

Met Val Ser Glu Asp Met Lys Leu Thr Asp Ser Glu Leu Gly Lys Leu
65　　　　　　　　70　　　　　　　　　75　　　　　　　　　80

Ala Asn Asn Ile Gln Glu Leu Leu Tyr Ser Ala Ser Asp Ile Cys His
　　　　　　　　　85　　　　　　　　90　　　　　　　　　95

Asp Arg Ala Val Lys Phe Leu Met Ser Arg Ala Lys Asp Gly Phe Leu
　　　　　　　100　　　　　　　　　105　　　　　　　　110

Glu Lys Leu Asn Ser Met Glu Phe Ile Thr Leu Ser Arg Leu Met Glu

●

　　　　　　115　　　　　　　　　120　　　　　　　　　125
Thr Phe Ile Leu Asp Thr Glu Gln Ile Cys Gly Arg Lys Ser Thr Ser
　　　130　　　　　　　　　135　　　　　　　　　140
Leu Leu Gly Ala Leu Gln Ser Gln Ala Ile Lys Phe Val Asn Arg Phe
145　　　　　　　　　150　　　　　　　　　155　　　　　　　　　160
His Glu Glu Arg Lys Thr Lys Leu Ser Leu Leu Leu Asp Asn Glu Arg
　　　　　　165　　　　　　　　　170　　　　　　　　　175
Trp Lys Gln Ala Asp Val Pro Ala Glu Phe Gln Asp Leu Val Asp Ser
　　　　　　180　　　　　　　　　185　　　　　　　　　190
Leu Ser Asp Gly Lys Ile Ala Leu Pro Glu Lys Lys Ser Gly Ala Thr
　　　195　　　　　　　　　200　　　　　　　　　205
Glu Glu Arg Lys Pro Ala Glu Val Leu Ile Val Glu Gly Gln Gln Tyr
　　　210　　　　　　　　　215　　　　　　　　　220
Ala Val Val Gly Thr Val Leu Leu Leu Ile Arg Ile Ile Leu Glu Tyr
225　　　　　　　　　230　　　　　　　　　235　　　　　　　　　240
Cys Gln Cys Val Asp Asn Ile Pro Ser Val Thr Thr Asp Met Leu Thr
　　　　　　245　　　　　　　　　250　　　　　　　　　255
Arg Leu Ser Asp Leu Leu Lys Tyr Phe Asn Ser Arg Ser Cys Gln Leu
　　　　　　260　　　　　　　　　265　　　　　　　　　270
Val Leu Gly Ala Gly Ala Leu Gln Val Val Gly Leu Lys Thr Ile Thr
　　　275　　　　　　　　　280　　　　　　　　　285
Thr Lys Asn Leu Ala Leu Ser Ser Arg Cys Leu Gln Leu Ile Val His
　　　290　　　　　　　　　295　　　　　　　　　300
Tyr Ile Pro Val Ile Arg Ala His Phe Glu Ala Arg Leu Pro Pro Lys
305　　　　　　　　　310　　　　　　　　　315　　　　　　　　　320
Gln Tyr Ser Met Leu Arg His Phe Asp His Ile Thr Lys Asp Tyr His
　　　　　　325　　　　　　　　　330　　　　　　　　　335
Asp His Ile Ala Glu Ile Ser Ala Lys Leu Val Ala Ile Met Asp Ser
　　　340　　　　　　　　　345　　　　　　　　　350

Leu Phe Asp Lys Leu Leu Ser Lys Tyr Glu Val Lys Ala Pro Val Pro
　　　355　　　　　　　　　　360　　　　　　　　　365

Ser Ala Cys Phe Arg Asn Ile Cys Lys Gln Met Thr Lys Met His Glu
　　　370　　　　　　　　375　　　　　　　　　380

Ala Ile Phe Asp Leu Leu Pro Glu Glu Gln Thr Gln Met Leu Phe Leu
385　　　　　　　　　390　　　　　　　　　395　　　　　　　　　400

Arg Ile Asn Ala Ser Tyr Lys Leu His Leu Lys Lys Gln Leu Ser His
　　　　　　　　405　　　　　　　　　410　　　　　　　　　415

Leu Asn Val Ile Asn Asp Gly Gly Pro Gln Asn Gly Leu Val Thr Ala
　　　　　　　　420　　　　　　　425　　　　　　　　430

Asp Val Ala Phe Tyr Thr Gly Asn Leu Gln Ala Leu Lys Gly Leu Lys
　　　435　　　　　　　　440　　　　　　　　445

Asp Leu Asp Leu Asn Met Ala Glu Ile Trp Glu Gln Lys Arg
　　　450　　　　　　　　455　　　　　　　460

<210> 2227

<211> 234

<212> PRT

<213> Homo sapiens

<400> 2227

Met Arg Ala Pro Leu Cys Leu Leu Leu Leu Val Ala His Ala Val Asp
1　　　　　　　　5　　　　　　　　10　　　　　　　　15

Met Leu Ala Leu Asn Arg Arg Lys Lys Gln Val Gly Thr Gly Leu Gly
　　　　　　　20　　　　　　　　25　　　　　　　　30

Gly Asn Cys Thr Gly Cys Ile Ile Cys Ser Glu Glu Asn Gly Cys Ser
　　　　　　　35　　　　　　　　40　　　　　　　　45

Thr Cys Gln Gln Arg Leu Phe Leu Phe Ile Arg Arg Glu Gly Ile Arg

```
            50                    55                    60
Gln Tyr Gly Lys Cys Leu His Asp Cys Pro Pro Gly Tyr Phe Gly Ile
    65                    70                    75                    80
Arg Gly Gln Glu Val Asn Arg Cys Lys Lys Cys Gly Ala Thr Cys Glu
                    85                    90                    95
Ser Cys Phe Ser Gln Asp Phe Cys Ile Arg Cys Lys Arg Gln Phe Tyr
                   100                   105                   110
Leu Tyr Lys Gly Lys Cys Leu Pro Thr Cys Pro Pro Gly Thr Leu Ala
                   115                   120                   125
His Gln Asn Thr Arg Glu Cys Gln Gly Glu Cys Glu Leu Gly Pro Trp
                   130                   135                   140
Gly Gly Trp Ser Pro Cys Thr His Asn Gly Lys Thr Cys Gly Ser Ala
145                   150                   155                   160
Trp Gly Leu Glu Ser Arg Val Arg Glu Ala Gly Arg Ala Gly His Glu
                   165                   170                   175
Glu Ala Ala Thr Cys Gln Val Leu Ser Glu Ser Arg Lys Cys Pro Ile
                   180                   185                   190
Gln Arg Pro Cys Pro Gly Glu Arg Ser Pro Gly Gln Lys Lys Gly Arg
                   195                   200                   205
Lys Asp Arg Arg Pro Arg Lys Asp Arg Lys Leu Asp Arg Arg Leu Asp
                   210                   215                   220
Val Arg Pro Arg Gln Pro Gly Leu Gln Pro
225                   230
```

<210> 2228

<211> 436

<212> PRT

<213> Homo sapiens

<400> 2228

```
Met Leu Trp Asn Phe Lys Pro His Ala Arg Ala Tyr Arg Tyr Val Gly
 1               5                  10                  15
His Lys Asp Val Val Thr Ser Val Gln Phe Ser Pro His Gly Asn Leu
                20                  25                  30
Leu Ala Ser Ala Ser Arg Asp Arg Thr Val Arg Leu Trp Ile Pro Asp
                35                  40                  45
Lys Arg Gly Lys Phe Ser Glu Phe Lys Ala His Thr Ala Pro Val Arg
                50                  55                  60
Ser Val Asp Phe Ser Ala Asp Gly Gln Phe Leu Ala Thr Ala Ser Glu
65                  70                  75                  80
Asp Lys Ser Ile Lys Val Trp Ser Met Tyr Arg Gln Arg Phe Leu Tyr
                85                  90                  95
Ser Leu Tyr Arg His Thr His Trp Val Arg Cys Ala Lys Phe Ser Pro
                100                 105                 110
Asp Gly Arg Leu Ile Val Ser Cys Ser Glu Asp Lys Thr Ile Lys Ile
                115                 120                 125
Trp Asp Thr Thr Asn Lys Gln Cys Val Asn Asn Phe Ser Asp Ser Val
                130                 135                 140
Gly Phe Ala Asn Phe Val Asp Phe Asn Pro Ser Gly Thr Cys Ile Ala
145                 150                 155                 160
Ser Ala Gly Ser Asp Gln Thr Val Lys Val Trp Asp Val Arg Val Asn
                165                 170                 175
Lys Leu Leu Gln His Tyr Gln Val His Ser Gly Gly Val Asn Cys Ile
                180                 185                 190
Ser Phe His Pro Ser Gly Asn Tyr Leu Ile Thr Ala Ser Ser Asp Gly
                195                 200                 205
Thr Leu Lys Ile Leu Asp Leu Leu Glu Gly Arg Leu Ile Tyr Thr Leu
```

```
              210                215                220
Gln Gly His Thr Gly Pro Ala Phe Thr Val Ser Phe Ser Lys Gly Gly
225                230                235                240
Glu Leu Phe Ala Ser Gly Gly Ala Asp Thr Gln Val Leu Leu Trp Arg
                   245                250                255
Thr Asn Phe Asp Glu Leu His Cys Lys Gly Leu Thr Lys Arg Asn Leu
                   260                265                270
Lys Arg Leu His Phe Asp Ser Pro Pro His Leu Leu Asp Ile Tyr Pro
                   275                280                285
Arg Thr Pro His Pro His Glu Glu Lys Val Glu Thr Val Glu Ile Asn
              290                295                300
Pro Lys Leu Glu Val Ile Asp Leu Gln Ile Ser Thr Pro Pro Val Met
305                310                315                320
Asp Ile Leu Ser Phe Asp Ser Thr Thr Thr Thr Glu Thr Ser Gly Arg
                   325                330                335
Thr Leu Pro Asp Lys Gly Glu Glu Ala Cys Gly Tyr Phe Leu Asn Pro
                   340                345                350
Ser Leu Met Ser Pro Glu Cys Leu Pro Thr Thr Thr Lys Lys Lys Thr
                   355                360                365
Glu Asp Met Ser Asp Leu Pro Cys Glu Ser Gln Arg Ser Ile Pro Leu
              370                375                380
Ala Val Thr Asp Ala Leu Glu His Ile Met Glu Gln Leu Asn Val Leu
385                390                395                400
Thr Gln Thr Val Ser Ile Leu Glu Gln Arg Leu Thr Leu Thr Glu Asp
                   405                410                415
Lys Leu Lys Asp Cys Leu Glu Asn Gln Gln Lys Leu Phe Ser Ala Val
                   420                425                430
Gln Gln Lys Ser
              435
```

<210> 2229

<211> 162

<212> PRT

<213> Homo sapiens

<400> 2229

Met Asn Ser Arg Thr Ala Ser Ala Arg Gly Trp Phe Ser Ser Arg Pro
1   5   10   15

Pro Thr Ser Glu Ser Asp Leu Glu Pro Ala Thr Asp Gly Pro Ala Ser
                20   25   30

Glu Thr Thr Thr Leu Ser Pro Glu Ala Thr Thr Phe Asn Asp Thr Arg
                35   40   45

Ile Pro Asp Ala Ala Gly Gly Thr Ala Gly Val Gly Thr Met Leu Leu
            50   55   60

Ser Phe Gly Ile Ile Thr Val Ile Gly Leu Ala Val Ala Leu Val Leu
65   70   75   80

Tyr Ile Arg Lys Lys Lys Arg Leu Glu Lys Leu Arg His Gln Leu Met
                85   90   95

Pro Met Tyr Asn Phe Asp Pro Thr Glu Glu Gln Asp Glu Leu Glu Gln
                100   105   110

Glu Leu Leu Glu His Gly Arg Asp Ala Ala Ser Val Gln Ala Ala Thr
            115   120   125

Ser Val Gln Ala Met Gln Gly Lys Thr Thr Leu Pro Ser Gln Gly Pro
        130   135   140

Leu Gln Arg Pro Ser Arg Leu Val Phe Thr Asp Val Ala Asn Ala Ile
145   150   155   160

His Val

<210> 2230

<211> 842

<212> PRT

<213> Homo sapiens

<400> 2230

Met	Glu	Arg	Tyr	Lys	Ala	Leu	Glu	Gln	Leu	Leu	Thr	Glu	Leu	Asp	Asp
1				5					10					15	

Phe	Leu	Lys	Ile	Leu	Asp	Gln	Glu	Asn	Leu	Ser	Ser	Thr	Ala	Leu	Val
			20					25				30			

Lys	Lys	Ser	Cys	Leu	Ala	Glu	Leu	Leu	Arg	Leu	Tyr	Thr	Lys	Ser	Ser
		35				40					45				

Ser	Ser	Asp	Glu	Glu	Tyr	Ile	Tyr	Met	Asn	Lys	Val	Thr	Ile	Asn	Lys
	50					55				60					

Gln	Gln	Asn	Ala	Glu	Ser	Gln	Gly	Lys	Ala	Pro	Glu	Glu	Gln	Gly	Leu
65					70				75					80	

Leu	Pro	Asn	Gly	Glu	Pro	Ser	Gln	His	Ser	Ser	Ala	Pro	Gln	Lys	Ser
				85				90					95		

Leu	Pro	Asp	Leu	Pro	Pro	Pro	Lys	Met	Ile	Pro	Glu	Arg	Lys	Gln	Leu
			100					105				110			

Ala	Ile	Pro	Lys	Thr	Glu	Ser	Pro	Glu	Gly	Tyr	Tyr	Glu	Glu	Ala	Glu
	115				120					125					

Pro	Tyr	Asp	Thr	Ser	Leu	Asn	Gly	His	Ser	Gly	Gly	Phe	Leu	Pro	Thr
	130				135				140						

Gly	Val	Pro	Arg	Trp	Val	Gln	Val	Pro	Glu	Arg	Val	Ile	Tyr	Ala	Thr
145				150				155				160			

Ile Thr Leu Glu Asp Gly Glu Ala Val Ser Ser Ser Tyr Glu Ser Tyr
　　　　　　　　　165　　　　　　　　　170　　　　　　　　　175

Asp Glu Glu Asp Gly Ser Lys Gly Lys Ser Ala Pro Tyr Gln Trp Pro
　　　　　　　　　180　　　　　　　　　185　　　　　　　　　190

Ser Pro Glu Ala Gly Ile Glu Leu Met Arg Asp Ala Arg Ile Cys Ala
　　　　　　　　　195　　　　　　　　　200　　　　　　　　　205

Phe Leu Trp Arg Lys Lys Trp Leu Gly Gln Trp Ala Lys Gln Leu Cys
　　　　　　　　　210　　　　　　　　　215　　　　　　　　　220

Val Ile Lys Asp Asn Arg Leu Leu Cys Tyr Lys Ser Ser Lys Asp His
225　　　　　　　　　230　　　　　　　　　235　　　　　　　　　240

Ser Pro Gln Leu Asp Val Asn Leu Leu Gly Ser Ser Val Ile His Lys
　　　　　　　　　245　　　　　　　　　250　　　　　　　　　255

Glu Lys Gln Val Arg Lys Lys Glu His Lys Leu Lys Ile Thr Pro Met
　　　　　　　　　260　　　　　　　　　265　　　　　　　　　270

Asn Ala Asp Val Ile Val Leu Gly Leu Gln Ser Lys Asp Gln Ala Glu
　　　　　　　　　275　　　　　　　　　280　　　　　　　　　285

Gln Trp Leu Arg Val Ile Gln Glu Val Ser Gly Leu Pro Ser Glu Gly
　　　　　　　　　290　　　　　　　　　295　　　　　　　　　300

Ala Ser Glu Gly Asn Gln Tyr Thr Pro Asp Ala Gln Arg Phe Asn Cys
305　　　　　　　　　310　　　　　　　　　315　　　　　　　　　320

Gln Lys Pro Asp Ile Ala Glu Lys Tyr Leu Ser Ala Ser Glu Tyr Gly
　　　　　　　　　325　　　　　　　　　330　　　　　　　　　335

Ser Ser Val Asp Gly His Pro Glu Val Pro Glu Thr Lys Asp Val Lys
　　　　　　　　　340　　　　　　　　　345　　　　　　　　　350

Lys Lys Cys Ser Ala Gly Leu Lys Leu Ser Asn Leu Met Asn Leu Gly
　　　　　　　　　355　　　　　　　　　360　　　　　　　　　365

Arg Lys Lys Ser Thr Ser Leu Glu Pro Val Glu Arg Ser Leu Glu Thr
　　　　　　　　　370　　　　　　　　　375　　　　　　　　　380

Ser Ser Tyr Leu Asn Val Leu Val Asn Ser Gln Trp Lys Ser Arg Trp

385　　　　　　　　　390　　　　　　　　　395　　　　　　　　　400

Cys Ser Val Arg Asp Asn His Leu His Phe Tyr Gln Asp Arg Asn Arg

　　　　　　　　　405　　　　　　　　　410　　　　　　　　　415

Ser Lys Val Ala Gln Gln Pro Leu Ser Leu Val Gly Cys Glu Val Val

　　　　　　　　　420　　　　　　　　　425　　　　　　　　　430

Pro Asp Pro Ser Pro Asp His Leu Tyr Ser Phe Arg Ile Leu His Lys

　　　　　　　　　435　　　　　　　　　440　　　　　　　　　445

Gly Glu Glu Leu Ala Lys Leu Glu Ala Lys Ser Ser Glu Glu Met Gly

　　　　　　　　　450　　　　　　　　　455　　　　　　　　　460

His Trp Leu Gly Leu Leu Leu Ser Glu Ser Gly Ser Lys Thr Asp Pro

465　　　　　　　　　470　　　　　　　　　475　　　　　　　　　480

Glu Glu Phe Thr Tyr Asp Tyr Val Asp Ala Asp Arg Val Ser Cys Ile

　　　　　　　　　485　　　　　　　　　490　　　　　　　　　495

Val Ser Ala Ala Lys Asn Ser Leu Leu Leu Met Gln Arg Lys Phe Ser

　　　　　　　　　500　　　　　　　　　505　　　　　　　　　510

Glu Pro Asn Thr Tyr Ile Asp Gly Leu Pro Ser Gln Asp Arg Gln Glu

　　　　　　　　　515　　　　　　　　　520　　　　　　　　　525

Glu Leu Tyr Asp Asp Val Asp Leu Ser Glu Leu Thr Ala Ala Val Glu

　　　　　　　　　530　　　　　　　　　535　　　　　　　　　540

Pro Thr Glu Glu Ala Thr Pro Val Ala Asp Asp Pro Asn Glu Arg Glu

545　　　　　　　　　550　　　　　　　　　555　　　　　　　　　560

Ser Asp Arg Val Tyr Leu Asp Leu Thr Pro Val Lys Ser Phe Leu His

　　　　　　　　　565　　　　　　　　　570　　　　　　　　　575

Gly Pro Ser Ser Ala Gln Ala Gln Ala Ser Ser Pro Thr Leu Ser Cys

　　　　　　　　　580　　　　　　　　　585　　　　　　　　　590

Leu Asp Asn Ala Thr Glu Ala Leu Pro Ala Asp Ser Gly Pro Gly Pro

　　　　　　　　　595　　　　　　　　　600　　　　　　　　　605

Thr Pro Asp Glu Pro Cys Ile Lys Cys Pro Glu Asn Leu Gly Glu Gln

　　　　　　　　　610　　　　　　　　　615　　　　　　　　　620

Gln Leu Glu Ser Leu Glu Pro Glu Asp Pro Ser Leu Arg Ile Thr Thr
625   630   635   640

Val Lys Ile Gln Thr Glu Gln Gln Arg Ile Ser Phe Pro Pro Ser Cys
                    645   650   655

Pro Asp Ala Val Val Ala Thr Pro Pro Gly Ala Ser Pro Pro Val Lys
                660   665   670

Asp Arg Leu Arg Val Thr Ser Ala Glu Ile Lys Leu Gly Lys Asn Arg
                675   680   685

Thr Glu Ala Glu Val Lys Arg Tyr Thr Glu Glu Lys Glu Arg Leu Glu
            690   695   700

Lys Lys Lys Glu Glu Ile Arg Gly His Leu Ala Gln Leu Arg Lys Glu
705   710   715   720

Lys Arg Glu Leu Lys Glu Thr Leu Leu Lys Cys Thr Asp Lys Glu Val
                    725   730   735

Leu Ala Ser Leu Glu Gln Lys Leu Lys Glu Ile Asp Glu Glu Cys Arg
                740   745   750

Gly Glu Glu Ser Arg Arg Val Asp Leu Glu Leu Ser Ile Met Glu Val
            755   760   765

Lys Asp Asn Leu Lys Lys Ala Glu Ala Gly Pro Val Thr Leu Gly Thr
770   775   780

Thr Val Asp Thr Thr His Leu Glu Asn Pro Lys Ala Val Thr Pro Ala
785   790   795   800

Ser Ala Pro Asp Cys Thr Pro Val Asn Ser Ala Thr Thr Leu Lys Asn
                805   810   815

Arg Pro Leu Ser Val Val Val Thr Gly Lys Gly Thr Val Leu Gln Lys
                820   825   830

Ala Lys Glu Trp Glu Lys Lys Gly Ala Ser
            835   840

<210> 2231

<211> 141

<212> PRT

<213> Homo sapiens

<400> 2231

Met Ile Ser Ala His Cys Ser Asn Leu His Phe Leu Gly Ser Ser Glu

1   5   10   15

Ser Pro Thr Leu Ala Ser Gln Val Gly Glu Ile Thr Gly Thr His His

            20   25   30

His Thr Arg Leu Ile Phe Val Phe Leu Val Glu Thr Gly Phe His His

            35   40   45

Val Gly His Ala Gly Leu Glu Leu Leu Thr Ser Ser Asp Pro Pro Thr

        50   55   60

Leu Ala Ser Arg Ser Ala Gly Ile Thr Gly Met Ser His Arg Ala Arg

65   70   75   80

Pro His Gly Ile Ser Arg Gly Glu Gln Val Thr Leu Gly Leu Pro Leu

                85   90   95

Glu Leu Leu Glu Cys Val Ser Trp Pro Leu Cys Gly Ser Pro Leu Arg

            100   105   110

Lys Ala Gln Ile Val Ser Thr Pro Pro Ser Pro Leu Ala Ala Leu Arg

            115   120   125

Val Pro Val Gly Ala Glu Gly Trp Gly Gly Thr Glu Gln

            130   135   140

<210> 2232

<211> 1139

<212> PRT

<213> Homo sapiens

<400> 2232

```
Met Met Met Gly Thr Arg Thr Arg Arg Ala Ala Arg Leu Thr Met Met
1               5                   10                  15

Gly Thr Arg Thr Leu Arg Ala Ala Arg Leu Met Met Met Gly Thr Arg
                20                  25                  30

Thr Arg Arg Ala Ala Arg Leu Thr Met Met Gly Thr Arg Thr Leu Arg
            35                  40                  45

Ala Ala Arg Leu Met Met Met Gly Thr Arg Thr His Arg Thr Ala Trp
        50                  55                  60

Leu Met Ile Met Gly Thr Arg Thr Leu Arg Thr Ala Arg Leu Met Met
65                  70                  75                  80

Arg Gly Thr Arg Thr Leu Arg Ala Ala Arg Leu Met Ile Met Gly Thr
                85                  90                  95

Arg Thr Arg Arg Ala Ala Arg Leu Thr Met Met Gly Thr Arg Thr His
                100                 105                 110

Arg Thr Ala Arg Leu Thr Met Met Gly Thr Arg Thr His Arg Thr Ala
            115                 120                 125

Arg Leu Thr Met Met Gly Thr Arg Thr His Arg Ala Ala Arg Leu Thr
        130                 135                 140

Met Met Gly Thr Arg Thr Leu Arg Ala Ala Trp Leu Met Val Met Gly
145                 150                 155                 160

Thr Arg Thr Arg Arg Ala Ala Arg Leu Met Ile Met Gly Thr Arg Thr
                165                 170                 175

Leu Arg Ala Ala Arg Leu Met Ile Met Gly Thr Arg Thr His Arg Thr
            180                 185                 190

Ala Arg Leu Met Met Arg Gly Thr Arg Thr Leu Arg Ser Ala Arg Leu
```

                195   200   205
Met Met Arg Gly Thr Arg Thr Leu Arg Ala Ala Arg Val Met Ile Met
            210   215   220
Gly Thr Arg Thr Arg Arg Ala Ala Arg Leu Met Ile Met Gly Thr Arg
225   230   235   240
Thr Leu Arg Ala Ala Gln Leu Met Met Met Gly Thr Arg Thr His Arg
                245   250   255
Ala Ala Arg Leu Met Met Met Gly Thr Arg Thr His Arg Thr Ala Arg
                260   265   270
Leu Met Met Met Gly Thr Arg Thr Leu Arg Ala Ala Arg Leu Met Met
            275   280   285
Met Gly Thr Arg Thr Leu Arg Ala Ala Arg Leu Met Ile Met Gly Thr
            290   295   300
Arg Thr His Arg Thr Ala Arg Leu Met Met Arg Gly Thr Arg Thr Leu
305   310   315   320
Arg Thr Ala Arg Leu Met Met Arg Gly Thr Arg Thr Leu Arg Ala Ala
                325   330   335
Arg Leu Thr Ile Met Gly Thr Arg Thr His Arg Ala Ala Arg Leu Thr
            340   345   350
Ile Met Gly Thr Arg Thr His Arg Thr Ala Arg Leu Thr Met Met Gly
            355   360   365
Thr Arg Thr Leu Arg Ala Ala Arg Leu Thr Met Met Gly Thr Arg Thr
            370   375   380
Leu Arg Ala Ala Arg Leu Met Ile Met Gly Thr Arg Thr His Arg Ala
385   390   395   400
Ala Arg Leu Met Met Met Gly Thr Arg Thr Leu Arg Ala Ala Arg Leu
                405   410   415
Met Met Met Gly Thr Arg Thr Leu Arg Ala Ala Arg Leu Met Met Met
            420   425   430

Gly Thr Arg Thr Leu Arg Ala Ala Arg Leu Met Met Met Gly Thr Arg
        435   440   445

Thr Leu Arg Ala Ala Arg Leu Met Met Met Gly Thr Arg Thr His Arg
        450   455   460

Ala Ala Arg Leu Met Arg Gly Thr Arg Thr His Arg Thr Ala Arg Leu
465   470   475   480

Met Met Arg Gly Thr Arg Thr Leu Arg Ala Ala Arg Leu Thr Met Met
                485   490   495

Gly Thr Arg Thr His Arg Ala Ala Arg Leu Thr Met Met Gly Thr Arg
        500   505   510

Thr His Arg Ala Ala Arg Leu Thr Met Met Gly Thr Arg Thr Leu Arg
        515   520   525

Ala Ala Arg Leu Thr Met Met Gly Thr Arg Thr His Arg Thr Ala Arg
        530   535   540

Leu Thr Met Met Gly Thr Arg Thr Leu Arg Ala Ala Arg Leu Met Met
545   550   555   560

Met Gly Thr Arg Thr Leu Arg Ala Ala Arg Leu Met Met Met Gly Thr
                565   570   575

Arg Thr His Arg Ala Ala Trp Leu Met Met Met Gly Thr Arg Thr Leu
                580   585   590

Arg Ala Ala Arg Leu Thr Met Met Gly Thr Arg Thr Leu Arg Ala Ala
        595   600   605

Arg Leu Met Met Met Gly Ser Arg Thr Leu Arg Ala Ala Gln Leu Met
        610   615   620

Met Met Gly Thr Arg Thr His Arg Thr Ala Trp Leu Met Ile Met Gly
625   630   635   640

Thr Arg Thr Leu Arg Thr Ala Arg Leu Met Met Arg Gly Thr Arg Thr
                645   650   655

Leu Arg Ala Ala Arg Leu Met Ile Met Gly Thr Arg Thr Arg Arg Ala

```
              660                    665                    670
Ala Arg Leu Met Ile Met Gly Thr Arg Thr Leu Arg Ala Ala Arg Leu
              675                    680                    685
Thr Ile Met Gly Thr Arg Thr His Arg Ala Ala Arg Leu Met Met Met
              690                    695                    700
Gly Thr Arg Thr Leu Arg Ala Ala Arg Leu Thr Ile Met Gly Thr Arg
705                    710                    715                    720
Thr His Arg Thr Ala Arg Leu Thr Met Met Gly Thr Arg Thr Leu Arg
                       725                    730                    735
Ala Ala Arg Leu Met Met Met Gly Thr Arg Thr Leu Arg Ala Ala Arg
                       740                    745                    750
Leu Met Met Met Gly Thr Arg Thr His Arg Ala Ala Arg Leu Met Met
                       755                    760                    765
Met Gly Thr Arg Thr Leu Arg Ala Ala Arg Leu Met Met Met Gly Thr
              770                    775                    780
Arg Thr Leu Arg Ala Ala Arg Leu Met Met Met Gly Thr Arg Thr Leu
785                    790                    795                    800
Arg Ala Ala Arg Leu Met Met Met Gly Thr Arg Thr His Arg Thr Ala
                       805                    810                    815
Arg Leu Met Met Arg Gly Thr Arg Thr Leu Arg Thr Ala Arg Leu Met
                       820                    825                    830
Met Arg Gly Thr Arg Thr Arg Arg Ala Ala Arg Leu Thr Ile Met Gly
              835                    840                    845
Thr Arg Thr Arg Arg Thr Ala Arg Leu Thr Met Met Gly Thr Arg Thr
              850                    855                    860
His Arg Thr Ala Arg Leu Thr Met Met Gly Thr Arg Thr Leu Arg Ala
865                    870                    875                    880
Ala Arg Leu Thr Met Met Gly Thr Arg Thr His Arg Thr Ala Arg Leu
                       885                    890                    895
```

Thr Met Met Gly Thr Arg Thr Leu Arg Ala Ala Arg Leu Met Met Met
　　　　　 900　　　　　　　　　 905　　　　　　　　　 910

Gly Thr Arg Thr Leu Arg Ala Ala Arg Leu Met Met Met Gly Thr Arg
　　　　 915　　　　　　　　 920　　　　　　　　 925

Thr His Arg Ala Ala Arg Leu Met Met Met Gly Thr Arg Thr Leu Arg
　　　 930　　　　　　　　 935　　　　　　　 940

Ala Ala Arg Leu Met Met Met Gly Thr Arg Thr Arg Arg Ala Ala Arg
945　　　　　　　 950　　　　　　　 955　　　　　　　　 960

Leu Met Met Met Gly Ser Arg Thr Leu Arg Ala Ala Arg Leu Met Met
　　　　　　　　 965　　　　　　　 970　　　　　　 975

Met Gly Thr Arg Thr His Arg Thr Ala Arg Leu Thr Met Met Gly Thr
　　　　　 980　　　　　　　 985　　　　　　 990

Arg Thr His Arg Thr Ala Arg Leu Thr Met Met Gly Thr Arg Thr Leu
　　　　 995　　　　　　　 1000　　　　　　 1005

Arg Ala Ala Arg Leu Thr Met Met Gly Thr Arg Thr His Arg Ala Ala
　　 1010　　　　　　　 1015　　　　　　 1020

Arg Leu Thr Met Met Gly Thr Arg Thr His Arg Ala Ala Arg Leu Thr
1025　　　　　　 1030　　　　　　 1035　　　　　　　 1040

Met Met Gly Thr Arg Thr Leu Arg Ala Ala Arg Leu Thr Met Met Gly
　　　　　 1045　　　　　　 1050　　　　　　　 1055

Thr Arg Thr His Arg Thr Ala Arg Leu Thr Met Met Gly Thr Arg Thr
　　　　 1060　　　　　　 1065　　　　　　 1070

Leu Arg Ala Ala Arg Leu Met Met Met Gly Thr Arg Thr Asp Arg Thr
　　　 1075　　　　　　 1080　　　　　　 1085

Ala Arg Leu Thr Met Met Gly Thr Arg Thr Leu Arg Ala Ala Arg Leu
　　 1090　　　　　　 1095　　　　　　 1100

Met Met Met Gly Thr Arg Thr Leu Arg Thr Ala Arg Leu Met Ile Met
1105　　　　　　 1110　　　　　　 1115　　　　　　　 1120

Gly Thr Arg Thr Leu Arg Ala Ala Arg Ser Thr Val Ala Glu Thr Arg

```
                    1125              1130              1135
Pro Gly Ala
```

<210> 2233

<211> 194

<212> PRT

<213> Homo sapiens

<400> 2233

```
Met Asp Leu Val Gly Gly Pro His Leu Ala Leu Ser Pro Ala Ser Gln
 1               5                  10                  15
Pro Ala Leu Phe Ile Cys Ser Ala Val Phe Val Ser Pro Trp His Ser
                20                  25                  30
Leu Phe Arg Leu Trp Asn Ile Tyr Glu Met Ser Gln Phe Leu Lys Ile
             35                  40                  45
Ile Glu Asn Lys Trp Phe Ala Leu Gly Ala Glu Gly Arg Gly Ser Gln
         50                  55                  60
Gly Arg Arg Gln Val Pro Gly Gln Phe Trp Gly Arg Ile Leu Ala Tyr
 65                  70                  75                  80
Pro Leu Leu Cys Phe Phe Ile Leu Leu Pro Trp Glu Pro Lys Gly Phe
                85                  90                  95
Gln Trp Asp Phe Leu Pro Arg Phe Leu Gln Tyr Tyr Asp Met Glu Arg
                100                 105                 110
Leu Glu His Ser Thr Ile His Phe Leu Ile Leu Thr Ser Thr Ile Ile
             115                 120                 125
Ser Ser Ile Pro Asn Ser Gly Ser Tyr Pro Leu Ser Ser Ser Tyr Ser
         130                 135                 140
```

Leu Ile Gln Leu Ile Asn Leu Gly Met Val Val Ser Gly Leu Ala Pro
145   150   155   160

Gly Pro Phe Cys Leu Leu Cys Leu Gln His Pro Leu Tyr Leu Leu Val
                    165   170   175

Asn Ser Ser Pro Ser Lys Pro Ser Gly Tyr Val Thr Thr Ser Lys Thr
                    180   185   190

Leu Asn

<210> 2234

<211> 369

<212> PRT

<213> Homo sapiens

<400> 2234

Met Thr Gly Ser Ala Val Glu Arg Leu Val Pro Glu Pro Leu Val Gly
1   5   10   15

Asn Leu Ser Gly Ile Glu Lys Glu Gln Leu Asp Ala Gln Arg Val Gly
                    20   25   30

Val Ala Ala Ala Val Ala Phe Gly Ser Gly Ala Leu Met Leu Gly Met
            35   40   45

Phe Val Leu Gln Leu Gly Val Leu Ser Thr Phe Leu Ser Glu Pro Val
        50   55   60

Val Lys Ala Leu Thr Ser Gly Ala Ala Leu His Val Leu Leu Ser Gln
65   70   75   80

Leu Pro Ser Leu Leu Gly Leu Ser Leu Pro Arg Gln Ile Gly Cys Phe
                    85   90   95

Ser Leu Phe Lys Thr Leu Ala Ser Leu Leu Thr Thr Leu Pro Arg Ser

```
              100                    105                    110
Ser Pro Ala Glu Leu Thr Ile Ser Ala Leu Ser Leu Ala Leu Leu Val
              115                    120                    125
Pro Val Lys Glu Leu Asn Val Arg Phe Arg Asp Arg Leu Pro Thr Pro
              130                    135                    140
Ile Pro Gly Glu Val Val Leu Val Leu Leu Ala Ser Val Leu Cys Phe
145                    150                    155                    160
Thr Ser Ser Val Asp Thr Arg Tyr Gln Val Gln Ile Val Gly Leu Leu
                        165                    170                    175
Pro Gly Gly Phe Pro Gln Pro Leu Leu Pro Asn Leu Ala Glu Leu Pro
                        180                    185                    190
Arg Ile Leu Ala Asp Ser Leu Pro Ile Ala Leu Val Ser Phe Ala Val
              195                    200                    205
Ser Ala Ser Leu Ala Ser Ile His Ala Asp Lys Tyr Ser Tyr Thr Ile
              210                    215                    220
Asp Ser Asn Gln Glu Phe Leu Ala His Gly Ala Ser Asn Leu Ile Ser
225                    230                    235                    240
Ser Leu Phe Ser Cys Phe Pro Asn Ser Ala Thr Leu Ala Thr Thr Asn
                        245                    250                    255
Leu Leu Val Asp Ala Gly Gly Lys Thr Gln Leu Ala Gly Leu Phe Ser
                        260                    265                    270
Cys Thr Val Val Leu Ser Val Leu Leu Trp Leu Gly Pro Phe Phe Tyr
                        275                    280                    285
Tyr Leu Pro Lys Ala Val Leu Ala Cys Ile Asn Ile Ser Ser Met Arg
              290                    295                    300
Gln Val Phe Cys Gln Met Gln Glu Leu Pro Gln Leu Trp His Ile Ser
305                    310                    315                    320
Arg Val Asp Phe Ala Val Trp Met Val Thr Trp Val Ala Val Val Thr
                        325                    330                    335
```

Leu Ser Val Asp Leu Gly Leu Ala Val Gly Val Val Phe Ser Met Met
            340   345   350

Thr Val Val Cys Arg Thr Arg Ser Ser Ser Arg Ser Arg Gly Ser Ala
            355   360   365

Ser

<210> 2235

<211> 304

<212> PRT

<213> Homo sapiens

<400> 2235

Met Ala Glu Phe Leu Asp Asp Gln Glu Thr Arg Leu Cys Asp Asn Cys
 1   5   10   15

Lys Lys Glu Ile Pro Val Phe Asn Phe Thr Ile His Glu Ile His Cys
                20   25   30

Gln Arg Asn Ile Gly Met Cys Pro Thr Cys Lys Glu Pro Phe Pro Lys
            35   40   45

Ser Asp Met Glu Thr His Met Ala Ala Glu His Cys Gln Val Thr Cys
        50   55   60

Lys Cys Asn Lys Lys Leu Glu Lys Arg Leu Leu Lys Lys His Glu Glu
65   70   75   80

Thr Glu Cys Pro Leu Arg Leu Ala Val Cys Gln His Cys Asp Leu Glu
                85   90   95

Leu Ser Ile Leu Lys Leu Lys Glu His Glu Asp Tyr Cys Gly Ala Arg
            100   105   110

Thr Glu Leu Cys Gly Asn Cys Gly Arg Asn Val Leu Val Lys Asp Leu

                115   120   125
Lys Thr His Pro Glu Val Cys Gly Arg Glu Gly Glu Glu Lys Arg Asn
            130   135   140
Glu Val Ala Ile Pro Pro Asn Ala Tyr Asp Glu Ser Trp Gly Gln Asp
145   150   155   160
Gly Ile Trp Ile Ala Ser Gln Leu Leu Arg Gln Ile Glu Ala Leu Asp
                        165   170   175
Pro Pro Met Arg Leu Pro Arg Arg Pro Leu Arg Ala Phe Glu Ser Asp
                        180   185   190
Val Phe His Asn Arg Thr Thr Asn Gln Arg Asn Ile Thr Ala Gln Val
            195   200   205
Ser Ile Gln Asn Asn Leu Phe Glu Glu Gln Glu Arg Gln Glu Arg Asn
            210   215   220
Arg Gly Gln Gln Pro Pro Lys Glu Gly Gly Glu Glu Ser Ala Asn Leu
225   230   235   240
Asp Phe Met Leu Ala Leu Ser Leu Gln Asn Glu Gly Gln Ala Ser Ser
                        245   250   255
Val Ala Glu Gln Asp Phe Trp Arg Ala Val Cys Glu Ala Asp Gln Ser
                        260   265   270
His Gly Gly Pro Arg Ser Leu Ser Asp Ile Arg Val Gln Leu Thr Arg
            275   280   285
Ser Cys Cys Leu Val Asn Phe Val Arg Ser Ser Thr Gln Arg Asn Cys
            290   295   300

<210> 2236

<211> 216

<212> PRT

<213> Homo sapiens

<400> 2236

Met Leu Lys Phe Gln Glu Ala Ala Lys Cys Val Ser Gly Ser Thr Ala
1   5   10   15

Ile Ser Thr Tyr Pro Lys Thr Leu Ile Ala Arg Arg Tyr Val Leu Gln
                20   25   30

Gln Lys Leu Gly Ser Gly Ser Phe Gly Thr Val Tyr Leu Val Ser Asp
            35   40   45

Lys Lys Ala Lys Arg Gly Glu Glu Leu Lys Val Leu Lys Glu Ile Ser
        50   55   60

Val Gly Glu Leu Asn Pro Asn Glu Thr Val Gln Ala Asn Leu Glu Ala
65   70   75   80

Gln Leu Leu Ser Lys Leu Asp His Pro Ala Ile Val Lys Phe His Ala
                85   90   95

Ser Phe Val Glu Gln Asp Asn Phe Cys Ile Ile Thr Glu Tyr Cys Glu
                100   105   110

Gly Arg Asp Leu Asp Asp Lys Ile Gln Glu Tyr Lys Gln Ala Gly Lys
            115   120   125

Ile Phe Pro Glu Asn Gln Ile Ile Glu Trp Phe Ile Gln Leu Leu Leu
            130   135   140

Gly Val Asp Tyr Met His Glu Arg Arg Ile Leu His Arg Asp Leu Lys
145   150   155   160

Ser Lys Asn Val Phe Leu Lys Asn Asn Leu Leu Lys Ile Gly Asp Phe
                165   170   175

Gly Val Ser Arg Leu Leu Met Gly Ser Cys Asp Leu Ala Thr Thr Leu
                180   185   190

Thr Gly Thr Pro His Tyr Met Ser Pro Glu Ala Leu Lys His Gln Gly
                195   200   205

Tyr Asp Thr Lys Ser Asp Ile Trp

210   215

<210> 2237

<211> 477

<212> PRT

<213> Homo sapiens

<400> 2237

Met Ser Val Ser Asn Leu Ser Trp Leu Lys Lys Lys Ser Gln Ser Val
1   5   10   15

Asp Ile Asn Ala Pro Gly Phe Asn Pro Leu Ala Gly Ala Gly Lys Gln
                20   25   30

Thr Pro Gln Ala Ser Lys Pro Pro Ala Pro Lys Thr Pro Ile Ile Glu
                35   40   45

Glu Glu Gln Asn Asn Ala Ala Asn Thr Gln Lys His Pro Ser Arg Arg
        50   55   60

Ser Glu Leu Lys Arg Phe Tyr Thr Ile Asp Thr Gly Gln Lys Lys Thr
65   70   75   80

Leu Asp Lys Lys Asp Gly Arg Arg Met Ser Phe Gln Lys Pro Lys Gly
                85   90   95

Thr Ile Glu Tyr Thr Val Glu Ser Arg Asp Ser Leu Asn Ser Ile Ala
                100   105   110

Leu Lys Phe Asp Thr Thr Pro Asn Glu Leu Val Gln Leu Asn Lys Leu
                115   120   125

Phe Ser Arg Ala Val Val Thr Gly Gln Val Leu Tyr Val Pro Asp Pro
        130   135   140

Glu Tyr Val Ser Ser Val Glu Ser Ser Pro Ser Leu Ser Pro Val Ser
145   150   155   160

Pro Leu Ser Pro Thr Ser Ser Glu Ala Glu Phe Asp Lys Thr Thr Asn
                165   170   175

Pro Asp Val His Pro Thr Glu Ala Thr Pro Ser Ser Thr Phe Thr Gly
                180   185   190

Ile Arg Pro Ala Arg Val Val Ser Ser Thr Ser Glu Glu Glu Glu Ala
                195   200   205

Phe Thr Glu Lys Phe Leu Lys Ile Asn Cys Lys Tyr Ile Thr Ser Gly
                210   215   220

Lys Gly Thr Val Ser Gly Val Leu Leu Val Thr Pro Asn Asn Ile Met
225   230   235   240

Phe Asp Pro His Lys Asn Asp Pro Leu Val Gln Glu Asn Gly Cys Glu
                245   250   255

Glu Tyr Gly Ile Met Cys Pro Met Glu Glu Val Met Ser Ala Ala Met
                260   265   270

Tyr Lys Glu Ile Leu Asp Ser Lys Ile Lys Glu Ser Leu Pro Ile Asp
                275   280   285

Ile Asp Gln Leu Ser Gly Arg Asp Phe Cys His Ser Lys Lys Met Thr
                290   295   300

Gly Ser Asn Thr Glu Glu Ile Asp Ser Arg Ile Arg Asp Ala Gly Asn
305   310   315   320

Asp Ser Ala Ser Thr Ala Pro Arg Ser Thr Glu Glu Ser Leu Ser Glu
                325   330   335

Asp Val Phe Thr Glu Ser Glu Leu Ser Pro Ile Arg Glu Glu Leu Val
                340   345   350

Ser Ser Asp Glu Leu Arg Gln Asp Lys Ser Ser Gly Ala Ser Ser Glu
                355   360   365

Ser Val Gln Thr Val Asn Gln Ala Glu Val Glu Ser Leu Thr Val Lys
                370   375   380

Ser Glu Ser Thr Gly Thr Pro Gly His Leu Arg Ser Asp Thr Glu His

385   390   395   400
Ser Thr Asn Glu Val Gly Thr Leu Cys His Lys Thr Asp Leu Asn Asn
                        405   410   415
Leu Glu Met Ala Ile Lys Glu Asp Gln Ile Ala Asp Asn Phe Gln Gly
            420   425   430
Ile Ser Gly Pro Lys Glu Asp Ser Thr Ser Ile Lys Gly Asn Ser Asp
            435   440   445
Gln Asp Ser Phe Leu His Glu Asn Ser Leu His Gln Glu Glu Ser Gln
        450   455   460
Lys Glu Asn Met Pro Cys Gly Glu Thr Ala Glu Phe Lys
465   470   475

<210> 2238

<211> 151

<212> PRT

<213> Homo sapiens

<400> 2238

Met Gly Arg Gln Ser Pro Ala Asp Gly Trp Ala Leu Trp Ala Ala Thr
1   5   10   15
Leu Cys Glu Gln Gly Val Gly Pro Ile His Phe Lys Asp Gln Ser Pro
                    20   25   30
Ala Leu Gly Glu Cys Ser Trp Pro Arg Leu Gly Ile Thr Phe Arg Gly
            35   40   45
Pro Ser Asp Ser Gly Gly Ala Cys Cys Gly Leu Pro Pro Ala Ser Gly
        50   55   60
Val Ala Glu Gln Thr Pro Gly Pro Gly Pro Val Pro Phe Ser Pro Pro
65   70   75   80

Gly Gln Thr Gln Thr Gln Thr Leu Gly Gly Trp Asn Gly Gly Gln Gly
　　　　　　　　　　85　　　　　　　　　90　　　　　　　　　95

Ser Met Gly Asp Val Gly Met Lys Val Gly Ala Gly Gly Ala Gly Gly
　　　　　　　100　　　　　　　　105　　　　　　　110

Pro Gly Thr Trp Met Gly Val Asp Arg Pro Phe Ser Leu Glu Ala Arg
　　　　　115　　　　　　　　120　　　　　　　125

Ser Ala Ala Leu Ala Gly Ser Glu Ala Pro Gly Thr Thr Ser Phe Pro
　　　130　　　　　　　135　　　　　　　140

Asp Phe Pro Val Trp Ser Val
145　　　　　　　150

<210> 2239

<211> 456

<212> PRT

<213> Homo sapiens

<400> 2239

Met Glu Ala Leu Gly Asp Leu Glu Gly Pro Arg Ala Pro Gly Gly Asp
1　　　　　　　5　　　　　　　　10　　　　　　　15

Asp Pro Ala Gly Ser Ala Gly Glu Thr Pro Gly Trp Leu Ser Arg Glu
　　　　　　　20　　　　　　　　25　　　　　　　30

Gln Val Phe Val Leu Ile Ser Ala Ala Ser Val Asn Leu Gly Ser Met
　　　　　35　　　　　　　　40　　　　　　　45

Met Cys Tyr Ser Ile Leu Gly Pro Phe Phe Pro Lys Glu Ala Glu Lys
　　　50　　　　　　　55　　　　　　　60

Lys Gly Ala Ser Asn Thr Ile Ile Gly Met Ile Phe Gly Cys Phe Ala
65　　　　　　　70　　　　　　　75　　　　　　　80

Leu Phe Glu Leu Leu Ala Ser Leu Val Phe Gly Asn Tyr Leu Val His

```
                    85                   90                   95
Ile Gly Ala Lys Phe Met Phe Val Ala Arg Met Phe Val Ser Gly Gly
                   100                  105                  110
Val Thr Ile Leu Phe Gly Val Leu Asp Arg Val Pro Asp Gly Pro Val
                   115                  120                  125
Phe Ile Ala Met Cys Phe Leu Val Arg Val Met Asp Ala Val Ser Phe
                   130                  135                  140
Ala Ala Ala Met Thr Ala Ser Ser Ser Ile Leu Ala Lys Ala Phe Pro
145                  150                  155                  160
Asn Asn Val Ala Thr Val Leu Gly Ser Leu Glu Thr Phe Ser Gly Leu
                        165                  170                  175
Gly Leu Ile Leu Gly Pro Pro Val Gly Gly Phe Leu Tyr Gln Ser Phe
                        180                  185                  190
Gly Tyr Glu Val Pro Phe Ile Val Leu Gly Cys Val Val Leu Leu Met
                   195                  200                  205
Val Pro Leu Asn Met Tyr Ile Leu Pro Asn Tyr Glu Ser Asp Pro Gly
210                  215                  220
Glu His Ser Phe Trp Lys Leu Ile Ala Leu Pro Lys Val Gly Leu Ile
225                  230                  235                  240
Ala Phe Val Ile Asn Ser Leu Ser Ser Cys Phe Gly Phe Leu Asp Pro
                        245                  250                  255
Thr Leu Ser Leu Phe Val Leu Glu Lys Phe Asn Leu Pro Ala Gly Tyr
                   260                  265                  270
Val Gly Leu Val Phe Leu Gly Met Ala Leu Ser Tyr Ala Ile Ser Ser
                   275                  280                  285
Pro Leu Phe Gly Leu Leu Ser Asp Lys Arg Pro Pro Leu Arg Lys Trp
                   290                  295                  300
Leu Leu Val Phe Gly Asn Leu Ile Thr Ala Gly Cys Tyr Met Leu Leu
305                  310                  315                  320
```

Gly Pro Val Pro Ile Leu His Ile Lys Ser Gln Leu Trp Leu Leu Val
     325   330   335

Leu Ile Leu Val Val Ser Gly Leu Ser Ala Gly Met Ser Ile Ile Pro
     340   345   350

Thr Phe Pro Glu Ile Leu Ser Cys Ala His Glu Asn Gly Phe Glu Glu
     355   360   365

Gly Leu Ser Thr Leu Gly Leu Val Ser Gly Leu Phe Ser Ala Met Trp
     370   375   380

Ser Ile Gly Ala Phe Met Gly Pro Thr Leu Gly Gly Phe Leu Tyr Glu
385   390   395   400

Lys Ile Gly Phe Glu Trp Ala Ala Ala Ile Gln Gly Leu Trp Ala Leu
     405   410   415

Ile Ser Gly Leu Ala Met Gly Leu Phe Tyr Leu Leu Glu Tyr Ser Arg
     420   425   430

Arg Lys Arg Ser Lys Ser Gln Asn Ile Leu Ser Thr Glu Glu Glu Arg
     435   440   445

Thr Thr Leu Leu Pro Asn Glu Thr
     450   455

<210> 2240

<211> 102

<212> PRT

<213> Homo sapiens

<400> 2240

Met Val Met Val Gly Ala Thr Ser Leu Gly Ala Tyr Gly Gly Glu Arg
1   5   10   15

Arg Ser Trp Val Pro Ser Ala His His Leu Gly Glu Gly Leu Val Pro

```
                20                  25                  30
Asp Pro Thr Ser Gly Phe Val Cys Gln Pro Gly Ala Phe Phe Ser Pro
                35                  40                  45
Tyr Leu Leu Asp Tyr Phe Ile Thr Leu Phe Leu Pro Glu Met His Leu
        50                  55                  60
Leu Leu Asp Trp Ser Arg Ser Lys Pro Cys Ser Phe Thr Glu Ala Leu
    65                  70                  75                  80
Pro Val Gly Ile Ser Cys Arg Ile Pro Pro Ser Arg Asp Gln Ser Val
                    85                  90                  95
Leu Trp Leu Phe His Lys
                100
```

<210> 2241

<211> 136

<212> PRT

<213> Homo sapiens

<400> 2241

```
Met Ser Ala Gly Glu Pro Ala Ala Ala Pro Asn Leu Asp Glu Glu Arg
    1                   5                  10                  15
Asn Leu Val Ala Val Pro Ala Glu Lys Pro His Gly Ser Pro His Ile
                20                  25                  30
Ser Thr Met Val Pro Gly Phe Ser His Pro His Arg Pro Arg Leu Leu
                35                  40                  45
Pro Ser His Pro Arg Pro Glu Thr Gln Lys Ala Leu Asp Arg Ala Ala
        50                  55                  60
Ser Ser Gly Ile Trp Thr Gly Leu Arg Tyr Leu Leu Pro Ala Pro Gln
    65                  70                  75                  80
```

Ser Ala Ile Arg His Ile His Pro Arg Gly Thr Arg Cys Ser Phe Arg
　　　　　　　　85　　　　　　　　　90　　　　　　　　　95

Gly Cys Leu Gln Gly Met Glu Asp Ser His Arg Arg Leu Leu Thr Ser
　　　　　　　100　　　　　　　105　　　　　　　110

His Ala Gln Val Ser Pro Arg Cys His Val Gln Ser Glu Pro Phe Leu
　　　　　　　115　　　　　　　120　　　　　　　125

Ala His Val Pro Val Leu Val Ala
　　　　130　　　　　　135

<210> 2242

<211> 148

<212> PRT

<213> Homo sapiens

<400> 2242

Met Gly Leu Arg Pro Pro Gly Asn Asn His Arg Ala Cys Ser Ser Ala
1　　　　　　　5　　　　　　　10　　　　　　　15

Pro Ala Ser Pro Glu Ser His Pro Arg Asp Gln Pro His Pro Gln His
　　　　　　　20　　　　　　　25　　　　　　　30

Asn Cys Pro Ala Gly Glu Ala Pro Trp Ala Trp Arg Gly Phe Pro Asp
　　　　　　　35　　　　　　　40　　　　　　　45

Thr Ala His Pro Gly Pro Ala Ser Ser Thr Lys Thr Glu Thr Leu Ala
　　　　50　　　　　　　55　　　　　　　60

Thr His Gly Gly Trp Gly Pro Gly Val Leu Arg Arg Gly Tyr Pro Gly
65　　　　　　　70　　　　　　　75　　　　　　　80

Pro Arg Pro Glu Ile His Gln Leu His Pro Arg Gly Gly Thr Ala Asp
　　　　　　　85　　　　　　　90　　　　　　　95

Gly Ser Gln His Gln Gln Asp Pro Arg Ala Pro Arg Thr Glu Val Cys

(●)

```
                100                   105                   110
Pro Thr His Phe Leu Pro Thr Thr Cys Ala Pro Glu Ser Arg Ala Cys
                115                   120                   125
Pro Gly Arg Trp Arg Pro Gly Val Glu Cys Thr Cys Ser His Glu Val
                130                   135                   140
Leu Gly Val Phe
145
```

<210> 2243

<211> 539

<212> PRT

<213> Homo sapiens

<400> 2243

```
Met Arg Ile Ser Phe Lys Ala Gly Val Tyr Val Pro His Pro Thr Gly
1                   5                   10                   15
His Val Thr Phe Ile Thr Leu Trp Trp Asn Glu Lys Lys Gly Ile Trp
                20                   25                   30
Asp Met Ile Asn Ser Gly Asn Ala Ile Val Cys Leu Arg Gln Gln Arg
                35                   40                   45
Asp Ser Gly Ser Arg Gly Arg Pro Arg Ala Ser Val Thr Ser Pro Asp
           50                   55                   60
Cys Arg Val Thr Val Ala Tyr Pro Gly Gly Ala Thr Arg Pro Ala Gly
65                   70                   75                   80
Lys Met Thr Ser Pro Ser Glu Leu Leu Gln Thr Ser Ala Arg Ser Gly
                85                   90                   95
Ser Trp Arg Ala Gly Gly Gly Trp Glu Thr Ser Arg Ala His Gly Thr
                100                   105                   110
```

Asp Arg Arg Gln Lys Pro Gly Gly Val Arg Trp Ala Pro Asp Pro Cys
　　　　　 115　　　　　　　　　 120　　　　　　　　　 125

Pro Pro Ser Ser Arg Ala Ala Pro Gly Gly Pro Ala Pro Ser Val Asn
　　 130　　　　　　　　　 135　　　　　　　　　 140

Ala Ala Gly Arg Pro Ile Arg Ala Gly Arg Gly Ala Ala Gln Pro Ile
145　　　　　　　　　 150　　　　　　　　　 155　　　　　　　　　 160

Ser Gly Gln Ser Ser Arg Ala Leu Pro Arg Ser Arg Ala Leu Pro Arg
　　　　　 165　　　　　　　　　 170　　　　　　　　　 175

Ser Arg Glu Leu Pro Ala Arg Cys Arg Arg Asp Trp Glu Arg Ala Pro
　　　　　 180　　　　　　　　　 185　　　　　　　　　 190

Gln Arg Thr Leu Ala Arg Gly Ser Ala Gln Ser Val Cys Glu Asp Pro
　　　　　 195　　　　　　　　　 200　　　　　　　　　 205

Ala Arg Arg Pro Pro Gly Asp Pro Met Ala Ser Glu Gly Leu Ala Gly
　　　　　 210　　　　　　　　　 215　　　　　　　　　 220

Ala Leu Ala Ser Val Leu Ala Gly Gln Gly Ser Ser Val His Ser Cys
225　　　　　　　　　 230　　　　　　　　　 235　　　　　　　　　 240

Asp Ser Ala Pro Ala Gly Glu Pro Pro Ala Pro Val Arg Leu Arg Lys
　　　　　 245　　　　　　　　　 250　　　　　　　　　 255

Asn Val Cys Tyr Val Val Leu Ala Val Phe Leu Ser Glu Gln Asp Glu
　　　　　 260　　　　　　　　　 265　　　　　　　　　 270

Val Leu Leu Ile Gln Glu Ala Lys Arg Glu Cys Arg Gly Ser Trp Tyr
　　　　　 275　　　　　　　　　 280　　　　　　　　　 285

Leu Pro Ala Gly Arg Met Glu Pro Gly Glu Thr Ile Val Glu Ala Leu
　　　　　 290　　　　　　　　　 295　　　　　　　　　 300

Gln Arg Glu Val Lys Glu Glu Ala Gly Leu His Cys Glu Pro Glu Thr
305　　　　　　　　　 310　　　　　　　　　 315　　　　　　　　　 320

Leu Leu Ser Val Glu Glu Arg Gly Pro Ser Trp Val Arg Phe Val Phe
　　　　　 325　　　　　　　　　 330　　　　　　　　　 335

Leu Ala Arg Pro Thr Gly Gly Ile Leu Lys Thr Ser Lys Glu Ala Asp